FINANCIAL HANDBOOK

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FINANCIAL HANDBOOK

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PREFACE

This Handbook is intended for constant reference by all who have in any way to do with the finances of a business. Its particular purpose is to provide readily and in sufficient detail serviceable information on all questions which are likely to arise in the financial management of business organizations whether large or small. It is designed not only for the financial manager or treasurer but also for executives in charge of other departments who have their own particular financial problems to cope with, as well as for all who come into financial relationship with the business. In short, it deals with the manifold financial aspects and relationships, both internal and external, that go to make up the general financial management, presenting both policies and working details.

There would be little need for such a financial handbook if all business executives had ready access to a complete library of business books and knew where to investigate specific subjects. Unfortunately, the average executive is unwilling to risk the time which is involved in searching through many volumes in order to find the answers to the scores of questions bearing on financial problems which constantly arise.

It occurred to me that if it were suggested to business executives and those who hope to be such that a business library of a very few books would be sufficient to answer 99 out of 100 questions in business and finance, there would be a willingness on their part to experiment. The risk is small. I suggest that each executive pick out two or three books dealing with his specialty. Most executives these days are specialists. One additional book should be a handbook containing in highly condensed form trustworthy information regarding the finances of the business as a whole as well as the financial aspect of its various departments.

The books dealing with specialized subjects are numerous and most of them are good. In this general book we have proceeded on the theory that a vast volume of principles, practices, customs, statistics, laws, rules, and almost every kind of financial material may be made available for quick use when needed. One of our most successful manufacturers was talking with the president of a large jobbing concern. The latter with pride said that their credit losses were only $1/5$th of 1 per cent of their sales. There was no approbation on the face of the manufacturer. "Don't you think that is very good?" he asked. "I do not," replied the manufacturer,

"it is not high enough." The president had been too close to his own concern, and too busy to read any discussion of credit risk. He had never stopped to think that his credit manager might be turning down good business in order to maintain an unnecessarily low loss ratio. In this Handbook executives will find enough information about the financial aspect of other people's specialties to enable them to check them up when it may be desirable or necessary.

The insurance broker may be disappointed in the section on insurance, but that section was not written for him; the works manager may be disappointed in the section on inventories, but that section was not written for him. Nevertheless, every insurance broker is vitally interested in the accuracy of inventories, and that section will tell him everything he can wish to know. A reading of it will enable him to ask more intelligent questions than would otherwise be the case. And the works manager should know more about the financial aspect of insurance than he does. He will find many suggestive helps in that section.

The busy banker may wish to suggest to a customer that he combine his business with that of a competitor. He knows a little about the Clayton Act, but is afraid to act without more knowledge. The Handbook instantly answers this as well as a thousand other questions.

The Handbook is the result of two years' work on the part of my associates and myself. We know that perfection has not been obtained in this first attempt. Much material has been rejected; some because of its apparent unsuitability; some because there had to be a limit to the size of the book. It is quite possible that some suitable subjects have been overlooked. One will be wiser when those who examine the contents have been heard from. Any criticism for the improvement of the volume will, therefore, be welcomed.

ROBERT H. MONTGOMERY

385 Madison Ave., New York,
September 24, 1925

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SECTION 1

FUNDAMENTALS OF BUSINESS ECONOMICS

Economic Organization from Viewpoint of Business Executive

THE ECONOMIC SYSTEM.—Business men, engrossed in the administration of individual industrial and business units, not infrequently lose sight of the broader outlines of the organization of which they are parts. Yet the functioning of this organization as a whole affects their individual activities so vitally, its smooth operation is so necessary to the economic well-being of the individual units, that an understanding of it is essential to efficient industrial leadership.

The economic system may be viewed as a vast machine—a machine for turning out goods and services, for providing the nation with the shelter, clothes, shoes, fuel, food, transportation and amusements which constitute the necessities and the amenities of existence. Into the hopper flow the raw materials of production, human effort and natural resources, and out at the other end flow goods and services in consumable form. The **real income** of a nation in a given year consists of the total volume of goods and services which flow out—the automobiles, beefsteaks, tons of coal and bushels of wheat which satisfy our wants. The smooth co-ordination of all the parts of this great machine—coal mines, iron mines, wheat fields, steel mills, railroads, banks—is essential to the maintenance of the volume of production. The individual unit must be efficient, of course, but without co-ordination and co-operation between units, economic chaos will result.

The history of economic development has been a history of the increasing complexity of this machine, with a constant increase in the number of parts and a constantly greater interdependence of parts. Local self-sufficiency has been sacrificed. A thousand isolated economic units have been welded into one, as the village community of medieval times has given way to the nation of today. The economic organization which supplies the material wants of man is today an all-embracing system, in which individual workers and individual business units are but cogs. These changes have brought a tremendous increase in productivity, but at a price. Complexity has brought greater delicacy, greater danger of breakdown, greater dependence of every part on the efficiency of every other. In this complexity and in the interdependence of economic units are found the essential characteristics of the existing economic order.

FUNDAMENTAL FACTORS.—Of fundamental industrial importance are the factors upon which the wealth and economic well-being of a country depend. For the primary economic process is that of **production.** At a later point in this discussion the **distribution** of the national product among the factors of production will be dealt with, but this problem of appor-

tionment is of subordinate importance to that which is concerned with the amount of the national product, with the volume of goods available for trade and consumption. The method by which a pie is divided is important, but the size of the pie in the first place may have a more immediate bearing upon the sizes of the various pieces. A consideration of the factors upon which the amount of the national real income depends will at the same time serve to introduce other problems relating to the structure of the economic system.

NATURAL RESOURCES.—The natural resources of a country are obviously of first importance. Large areas of fertile soil, rich mines, well stocked fisheries, broad timber lands, navigable rivers and easily developed routes of land transportation, a climate which encourages toil and invigorates workers, these are **basic factors** of a country's wealth. Farms, factories, fleets and work-shops must be built upon such natural wealth. It is true that human effort may make up for some natural deficiencies and that interchange of commodities may atone for the absence of other resources, but in the last analysis nature controls. A scant subsistence may be wrung from deserts or steppes, but that surplus above bare physical needs which permits the development of the arts of civilization and the attainment of a reasonable degree of well-being can only be secured when natural conditions are propitious. The **effect of depletion** of natural resources—exhaustion of the soil, deforestation, draining of oil deposits and the using up of raw materials—need only be suggested. It has been held by some that Rome fell because the soil of Italy became sterile.

NATURE OF CAPITAL, AND ITS PART IN PRODUCTION.—The tools, machinery and equipment of all sorts used in the exploitation of natural resources—in other words, the **economic capital** of a given industrial group—constitute a second factor affecting the size of the national income. We may, under favorable conditions, pick the fruits of nature with our bare hands, and thrive. But modern man is not blessed with such idyllic conditions. To grow wheat, to mine coal, to build houses, to make clothes, **tools** are needed. Tools, of course, are never ends in themselves. A hammer or a combined harvester will not satisfy our wants as a house or a loaf of bread will. But with the hammer and the harvester the things we want ultimately are secured in far greater quantities, or with less labor, than if they were produced without the aid of these instruments. It is the function of these tools to make human labor more productive by enabling labor to be more effectively applied. A plough is superior to a pointed stick, or to bare hands, as a means of cultivating the soil. Such tools are economic capital. We commonly mislead ourselves by thinking of economic capital in abstract terms. The capital of society consists primarily of the concrete equipment which man has produced for the purpose of increasing the effectiveness of his labor—the ploughs and harrows, railroads and canals, steamships and motor trucks, steel mills and textile factories—together with the surplus of consumable goods which permits such equipment to be produced.

The original inhabitants of this continent possessed even richer natural resources than we now do, but the consumable wealth we extract in a day is greater than that which the American Indians could extract in many years. A difference in wants and a difference in the size of the population are of course partly responsible for this, but the most important factor is the tremendous difference in technical equipment. It is chiefly because of our superior equipment that the Indian's scant fields of maize are replaced by the vast stretches

of the corn belt, his humble tepee by the homes, apartments and skyscrapers which culminate in the Woolworth Building, his trails by hundreds of thousands of miles of paved roads and steel tracks, his horse by Mogul engines and touring cars. The size of the pie which is to be divided has been increased a thousand-fold by this equipment, and the safe-guarding of this equipment is a prime essential to the maintenance of the present size of the pie.

MAINTENANCE OF ECONOMIC CAPITAL.—The character and volume of the capital equipment of a given economic area depend upon two factors. The first of these is the **technical knowledge and inventive genius** of the inhabitants. The great inventions of the industrial revolution were the products of mechanically creative minds possessing scientific knowledge of the properties of matter and of the forces of nature. Such knowledge and such a creative bent are essential to technical improvements in industry. But they are not alone sufficient to insure the adoption and full use of such improvements. For this, the existence of a **surplus of goods** is essential, a surplus which will permit labor to be transferred from the direct production of consumable goods to the production of capital equipment which will serve the same end, that of swelling the final product of consumable goods.

The tremendous importance of such a surplus, and of the saving which permits this surplus to be accumulated, cannot be overemphasized. If in any one year we should consume the full amount of the national product, laying nothing aside to support laborers engaged in the manufacture and repair of capital equipment, the productive capacities of the country would be immeasurably impaired. Railroads would break down, factories would close, widespread unemployment would follow, and the wages of labor, together with the income of all the other factors of production, would suffer great reductions. The maintenance of the volume of saving, therefore, is fundamentally important in maintaining the volume of production.

ECONOMIC USE OF CAPITAL.—The proper use of the surplus thus saved is no less important than the process of saving. The existence of such a surplus enables some members of the productive population to engage in activities other than the direct production of consumable goods. Such a surplus is fruitful if these members engage in essential indirect activities, such as the production of capital goods. But if the surplus is used to build navies, support armies, to manufacture ammunition, to produce luxuries in excessive quantities, to enable some members of the population to live in idleness, the surplus may serve a vicious instead of a useful purpose. This is not to deny that navies and armies may be necessary at times. But they are always economically wasteful, and can be justified only when they serve other valid social ends.

POPULATION AND PRODUCTION.—The **third factor** upon which the total volume of production and hence the rewards of the factors of production depend is the **character of the labor supply,** in other words, the character of the population. The problem here is somewhat different from that faced in the two previous cases, for labor is a **consumer as well as a producer of wealth,** and certain conditions which may be to its advantage in one connection may not be so in another. In general, of course, an increase in the total population will increase the total product, but will at the same time increase the number of consumers and thus tend to decrease the share of each.

Up to a certain point the former tendency will more than offset the latter, so that a clear individual gain results from an increase of population. This is so because natural resources may be more fully exploited and because advantage may be taken of all the economies of division of labor with a larger popu-

lation. But there is a point in population growth at which the law of decreasing returns comes into play. When full advantage has been taken of **division of labor,** and the resources of the country are being exploited to the limit of efficiency, as set by existing methods and equipment, additional hands will add relatively less to the national product, and the general standard of living may be impaired by a further growth of population.

It is true that the opening of new resources and improvements in industrial technology may offer new possibilities of population growth. The discovery of the new world and the inventions of the industrial revolution thus served to remove old barriers to population increase in the European stocks, opening eras of unprecedented growth. But, given the constant tendency of population to increase, the point of decreasing returns is sooner or later reached again, and there is pressure toward the point at which the means of subsistence will be barely adequate. India and parts of China are thus teeming with life; the welfare of all has been impaired by the mere increase in numbers. The total product of industry and the share of each of the factors of production in that product are thus directly affected by the total population of an economic area.

EFFECT OF CHARACTER OF POPULATION ON PRODUCTION.—The character of the population of a given area, quite apart from its size, has an important bearing upon the volume of the industrial product. **Natural aptitude** for sustained endeavor of the type required in modern industrial civilization is not, apparently, an attribute of every racial type. In the absence of such aptitude that surplus beyond immediate needs which is essential to economic development cannot be accumulated. The productivity of labor depends, also, upon the native intelligence and education of the individual workers. These are not alone necessary for the efficient performance of daily tasks, but they are even more essential if there is to be ready adaptation to changing industrial technique. If we are sure of one thing with regard to the future it is that present methods will change, that the change will be rapid, universal and constant, affecting every industrial process. Adaptation to change requires intelligence and trained minds. The worker trained for a single task and unable to adapt himself to new methods becomes a useless impediment, a source of economic waste. Economic productivity depends no less upon the intelligence and training of the individual cogs in the industrial machine than upon any of the other factors mentioned.

ORGANIZING ABILITY AND PRODUCTION.—As factors affecting the total volume of production, and hence the rewards and well-being of every member of the population, we have mentioned natural resources, capital equipment and the surplus which makes such equipment possible, the size of the population devoted to industrial production, and the aptitude, intelligence and training of the members of this population. There is one additional factor of outstanding importance. This is the amount and character of the organizing ability at the disposal of any economic group. With the increased complexity which division of labor in all its phases has introduced into the economic system, **the functions of the organizer and administrator** have become more and more significant and essential. A community blessed with rich resources, adequate capital, a numerous and intelligent working force would yet be economically poor, if there were not present in the population those elements of initiative, judgment and administrative ability which are essential to the launching and directing of an enterprise.

As a stimulus to the exercise of such ability society has in the past offered

rich rewards to the successful business leader, and such rewards are still held out. These rewards have undoubtedly been excessive at times, unearned and undeserved. Yet this ability plays such a vital part in the functioning of the economic system as we know it that even apparently excessive rewards have been permitted in the belief that the system as a whole is sound. We are witnessing today some limitations to these rewards, and the future may well witness further limitations. But whether such organizing ability be called forth by the lure of profits or in other ways, it is essential to the functioning of the industrial system. The size of the share of labor itself in the joint product of industry is contingent upon the presence and exercise of such ability.

CONSTITUTION OF THE INDIVIDUAL BUSINESS UNIT.—The factors upon which the productive capacity of a country depends have been discussed above in general terms, as these four agents appear in the large in the functioning of the economic system. But in the actual working of this system these factors are brought together in a multitude of small units, which constitute the **elements of the national economic structure.** The various individual establishments which are links in the chains of production and distribution are themselves composites of these four factors, and some of the major economic questions of the day center about the problem of securing harmonious co-operation among these agents.

BUSINESS ENTERPRISE.—The task of combining these diverse elements, as has been noted, falls to the organizing and directing factor in industry, which is called business enterprise. This task is not merely the bringing together of land, labor and capital. It means in a specific case the securing of proper land and suitable materials, qualified labor and appropriate capital equipment, and the welding of these factors into a **productive unit** in the proper proportions for the given purpose. How much capital may be profitably employed? What kind and what amount of labor should be secured? How much land is needed? How may labor, land and capital be made to work harmoniously together? What system of organization shall be employed? How shall the problem of mass management be met?

These are problems which in the past have not been solved generally either by investors of capital, laborers, or owners of land, as such. For their solution there has been called forth the separate organizing factor, business enterprise, which **buys or rents land, purchases raw materials, hires labor and borrows capital, and combines them effectively into a producing unit.** This factor may take any one of a number of forms, of which the individual enterprise, the partnership and the corporation are most common.

In the organization of the business unit there is not always the clear-cut distinction between elements which has been assumed in the above description. Actually, certain of the factors shade into each other in many cases, and there may exist no sharp line of demarcation between the shares received by the different agents for their part in production. Thus the single business man may own his own capital and may perform a great deal of the labor necessary to operate his business. It is often impossible to separate business profits from the wages of management, or economic rent from interest on capital. But the outline given, simplified as it is, may serve to make clear the structure of a productive unit in industry and to indicate the nature of the problem that arises in dividing the social product.

TIES BETWEEN ECONOMIC UNITS.—The characteristics of the modern economic system are revealed in part in the structure of the individual business unit, as described above. But for an understanding of the **economic**

order as a system it is necessary to comprehend the nature of the ties which bind these individual units together, making of them an immense, complex and finely articulated whole. These ties, in their number and diversity, are the most distinctive features of our present industrial system, rendering it more efficient and at the same time more sensitive to disturbances than any other economic order the world has ever known.

The **connections between units in the economic system** are not all direct, visible and obvious. A trader or manufacturer is conscious of only a limited number of contacts with the business world in which he functions, yet he is tied to it by a complex variety of bonds, of many of which he is quite unaware. And these ties are all-important. The existing order, in its peculiar susceptibility to crises, to business booms and depressions, in its characteristic reactions to disturbances in every part of the economic system, bears witness daily to the variety of these channels of communication and to the extent to which they permeate the system as a whole.

The **modern price system** is perhaps the most important factor in this tying together in a complex whole of the various parts which may be so widely separated geographically or functionally. The nature of these price connections will be the subject of later discussion. Certain other direct and important relations may be indicated.

ROUTE FROM PRODUCER TO CONSUMER.—The industrial system may be viewed as consisting of a number of parallel channels, down which the products of industry flow. There are numerous inter-connecting canals, but the broad channels down which the main streams flow are of primary importance and trace out the most significant economic relations. Such a channel has its source in a given extractive industry—in wheat fields, iron mines, lumber camps, cattle ranges or cotton plantations—where the raw materials are obtained from the earth. Thence the materials flow downward to their ultimate destination, the final consumer, passing through the hands of middlemen of various degrees and kinds, transportation agencies and manufacturing concerns.

Storage elevators, warehouses and various contributory services, such as banks, insurance companies and exchanges, may intervene to complicate the process. Each route is characterized by a close inter-relation of parts, and by numerous and intimate points of contact with routes in other industries. The channel may be direct and simple, or devious and complicated. In general, the development of modern methods, with increased division of labor, has increased the complexity of the course which goods follow, though the movement toward integration, or vertical combination in industry, constitutes a tendency toward simplification. The industrial system is simply an organization of many such channels along which goods of diverse types move, to be belched forth at last as finished products.

COMPETITIVE CONTACTS.—Such a view of the economic system indicates the character of some of the **inter-relations between units,** but it does not suggest all the ties which connect the individual business unit to the other parts of the system. Apart from the ties resulting from direct buying and selling relations, the force of competition sets up bonds which act as connecting links between the various parts of the economic structure. It is through such links as these that influences originally affecting one part of the economic system are transmitted to other parts, making the business cycle, for example, a phenomenon which touches all elements of the business world.

Competitive ties of four general types may be distinguished. Perhaps the

most obvious relations are those which center about the **selling market** of a given concern. Here there are direct and unavoidable contacts with all concerns producing the same or similar articles or selling the same or similar services. In **buying** its **raw materials and equipment** it comes again into competition with numerous industrial units. In **hiring labor** and in seeking to retain its own working force it is constantly in competition with other units. And finally in tapping the funds of **capital and credit** which play such an important part in modern industry, a business or industrial unit comes again into active competition with other units. Thus on all sides a given enterprise is tied to others; isolation is unthinkable. It is an integral part of a system.

SPECIALIZATION IN THE ECONOMIC SYSTEM.—The development of this system of closely correlated parts has resembled in many ways the growth of specialization within the single unit. **Technical specialization,** minute division of function, has uncovered hitherto undreamed of productive capacities, and has made possible the astonishing advances of the nineteenth and twentieth centuries. No less fruitful has been the similar process of **industrial and geographical division of labor** which has brought about the existence of these numerous parts in the economic system. But, just as technical division of labor within a manufacturing establishment intensifies the difficulties of administration, and makes the smoothest co-operation vital to efficient production, so the industrial division of labor has made the task of co-ordinating the economic processes of society perhaps the most difficult economic problem of today, as it is the most vital to economic well-being. That fine adjustment of parts which is essential to the operation of a delicately constructed machine must be secured for the efficient functioning of the economic system. The degree of co-ordination which is actually attained is remarkable, in view of the diversity of interests pursued by the millions of individual workers included in the system, but the co-ordination is still imperfect. To secure more perfect co-ordination and to learn to control more effectively the machine as a whole—these problems remain for the present generation to solve.

BASIC CONSIDERATIONS RELATING TO DISTRIBUTION.—"Distribution" is the term used by economists to designate the process of **dividing the joint product** of the factors of production among the several factors. (This meaning of distribution is not to be confused with that current usage in which it is synonymous with "marketing.") Before discussing the process of distribution in detail, certain considerations of paramount importance in connection with this problem should be noted. Many different principles upon which the joint product of industry might be divided, principles which may be based upon conditions varying all the way from chattel slavery to communism, may be conceived, but unless three primary requirements are met, no economic system can be expected to endure.

Welfare of Producers.—First and most important is the welfare of those who produce, by physical and mental effort. Material comforts in the way of food, clothing and shelter, together with educational opportunities for the great mass of workers of a nation, constitute a prior lien upon the product of industry.

Development of Capital Equipment.—A second fundamental requirement is that the product of industry be so disposed and labor so directed that the capital equipment—the tools, machines, railroads, factories, surplus food supplies—be fully maintained, and increased and improved as population needs and the march of invention warrants. It needs no argument to demonstrate that modern populations cannot survive unless the material equipment of

industry be kept up. In order that this be done it is essential that a certain proportion of the labor of society be devoted to the production of the equipment which serves society by facilitating the production of consumable goods. This necessitates the production of a surplus of consumable goods by other workers, the consumption of less than they produce. Using the counters with which men calculate under the price system, it means that part of the money income of the mass of income recipients must be saved and invested. The **process of investment** is one by which control of the goods which this surplus money income represents is handed over to the borrower, the railroad, steel mill or textile factory, the goods being used by this borrower to support labor employed in replacing or adding to its material equipment, its capital, in the true sense of that word. The principle upon which the process of distribution is based must be one which permits and encourages the saving which eventuates as capital equipment.

Maintenance of Economic Productivity.—The third requirement is that the division of the product of industry be performed in such a way that the productivity of the economic system is not impaired. This involves the two considerations first mentioned, but includes other factors which need not be detailed here. If a nation's economic product is so apportioned that incentive to labor and to leadership is lacking, that initiative is lost, or that the productive efficiency of the system is adversely affected in any other way, the process of division is based upon faulty principles. Industrial productivity is by no means the sole requirement of our economic system, nor the most important when human values are in question, but the attainment of other ends and the satisfaction of other requirements are conditioned by the degree of productive efficiency attained.

FACTORS AFFECTING REMUNERATION FOR ECONOMIC ACTIVITIES.—With these considerations in mind, the factors which affect the remuneration of labor and of the other agents of production may be briefly outlined. These factors are of **two general types**—those which affect the amount to be divided and those which affect the process of division itself. The first class includes all factors which affect the total volume of production, for the real rewards of labor, in terms of material goods, depend in the last analysis upon the amount of consumable wealth produced. The Patagonian and the Eskimo live upon lower economic planes than the average American primarily because of differences in the volume of goods produced, not because of differences in social structure, legal systems, or method of dividing the product. The well-being of the mass of a nation's citizens depends, of course, upon the way in which the national product is divided, but it depends more immediately upon the total volume of goods available for division.

The factors which influence the volume of production have been outlined above. Therein the dependence of production upon the efficient use of natural resources, upon the character and training of the population, upon adequate capital equipment and upon efficient industrial leadership was pointed out. It may appear that these factors have but a remote and uncertain bearing upon the central problem now under consideration, that of the division of the national product. Yet the factors named are of major and immediate importance. For these determine the size of the pie to be divided—the number of bushels of wheat, potatoes and corn, tons of coal and pounds of beef, yards of cloth and gallons of gasolene, which make up the annual real income of an economic group.

Bearing in mind the importance of those factors which affect the size

of the total product which is to be divided, the forces which affect the process of division itself may be briefly considered. Many general theories purporting to explain the process of distribution have been advanced, but it may be questioned whether any one general explanation is of universal validity. The process by which the material goods produced by society are divided among all who have co-operated directly or indirectly in their production is a highly involved one, complicated by the fact that the return any one individual receives may consist of several different shares (as a farmer may in his own person receive wages, interest, profits and rent), and doubly complicated by the fact that it is carried on behind the screen of prices, behind monetary returns. While no one theory may describe the process, an explanation of certain of the forces at work may at least clarify the problem.

RÔLE OF BUSINESS ENTERPRISE IN DISTRIBUTION.—It is the business leader, the organizing factor in production, through whose hands the actual process of distribution takes place. When the division of function in production is simple and perfectly clear-cut we have the organizer renting land, borrowing capital (strictly, he borrows the money which gives command over capital goods), hiring manual labor, a clerical force and his executive officers, paying these various agencies out of his proceeds and keeping the balance for himself. To the land-owner he pays **rent,** for the use of capital he pays **interest**, for the services of labor he pays **wages** (including salaries), while his own share constitutes **profits.** (If the enterpriser is not an individual but a corporation the profits, when apportioned, appear as **dividends.**) The question: "What determines the relative size of these shares?" is equivalent to: "What determines how much the enterpriser shall pay these various agents and how much he shall keep for himself?"

To the business man himself this is merely a problem in buying and selling. He pays for the use of land an amount fixed by the competition of the market, with regard to the quality and location of the given site. He borrows capital at the market rate of interest, and hires labor at prevailing wage rates. He may shade the market rates a little by astute bargaining, but essentially the market guides him. Any explanation, therefore, must go back of the market to the forces determining the market rates for these various agents. A detailed account of the forces at work in a given case is not possible here, even if knowledge of all such details were to be had. The present discussion must be confined to the factors which are peculiar and unique in affecting the play of competition in the case of each agent.

CONDITIONS DETERMINING RENT.—The amount secured by the owner of any particular piece of land depends upon the relative advantage, for a given purpose, which the utilization of that property conveys. In the case of land it is a **differential advantage** for which a price is paid, an advantage which one site possesses over others. This differential advantage may be due to a favorable location, as in the case of a retail trading site, fertility, in the case of agricultural land, or richness, in the case of a mine. It is because a given amount of labor will produce more on one site than on others that rent will be paid for its use. It follows that rents shade off by degrees, as the degrees of advantage diminish, until **"no-rent" land** is reached, land for the use of which nothing will be paid.

Rent, then, represents a share in distribution paid for the use of property in the form of natural resources, and its amount, in the case of a given site, depends upon the relative advantage resulting from the use of that site. Through competition the amount actually received for its use tends to approach the

full value of this differential advantage, though the money rental may frequently be less than the full **economic rent** which might be exacted. As population increases and the available land is more fully occupied rents rise, and the no-rent limit is pushed farther and farther out.

RATE OF INTEREST.—Interest, like rent, represents a payment for the use of property, but in this case the property is that which has been produced by man. The actual **rate of interest** prevailing at a given time is determined by the play of competition between borrowers and lenders of capital, the bids of the former being influenced by the amount they can gain from the use of additional increments of capital for specific purposes. As the **productivity of capital** thus lies back of the demand for it, so the fact that the accumulation of capital involves **abstinence,** at least for some savers, limits the amount accumulated. This limitation is obviously an important factor, from the side of supply, in determining the market rate of interest. New inventions, increasing the productivity of capital, tend to raise the rate of interest, while the constant accumulation of new capital tends to lower it. The net result has been a steady but slow decline in the interest rate, a decline which was interrupted by the destruction of capital during the World War.

NON-COMPETING GROUPS IN RELATION TO WAGES.—The share of labor in the total annual production of economic goods is again determined by general market forces similar to those described above, but here again a number of conditions affecting only this particular problem are met with. A distinct and peculiar characteristic of labor is found in the existence of **non-competing groups.** The capital available for investment, which is represented by funds in liquid form, may be looked upon as homogeneous. The investor may buy a railroad bond or a steel bond, may lend to a telephone company or to a textile mill. All are competing for his funds, and in the market a uniform rate will be fixed for investments of the same general strength. Not so in the labor market. Bank clerks do not compete with bricklayers, bookkeepers with carpenters, engineers with coal heavers. The forces of competition play in determining wage rates, but they play within circumscribed regions, determining many rates, not one common rate with minor variations. The peculiarities of the labor market cannot be understood without a recognition of the existence of these more or less distinct compartments.

CLASSIFICATION OF NON-COMPETING GROUPS.—No final classification of these non-competing groups is possible, for no clear-cut and definite lines of cleavage may be drawn. The following division, representing very real lines of economic difference, has been suggested. More detailed groups might well be set up within each class, if minor wage differences were of interest. The five fundamental groups, set off from each other by differences of education and training, other environmental differences and, to some extent, by differences of inborn gifts, are the following:

1. Unskilled manual laborers
2. Semi-skilled manual workers
3. Skilled manual workers
4. Clerical workers
5. Salaried business managers

This list is not designed to include professional men nor independent business organizers, who draw their main rewards from profits.

TENDENCY TO EQUALITY OF WAGES WITHIN GROUPS.—Within each of these groups wages, in the broad meaning of that term, tend to a rough equality. In certain of the higher groups there may be very marked differences but these do not destroy the significance of the general classification.

Differences within a group tend to disappear as superior rewards attract men from other occupations in the same class, or change the direction in which rising generations are led. The adjustment is slow, and never perfect, but it is much more marked within each group than between groups. The differences between groups tend to be fixed and constant, though particular individuals may cross the economic boundaries between groups.

DETERMINATION OF WAGES.—The immediate problem is: What determines the wage received by an individual within any one of these groups? The answer in general terms is as follows: The **common wage within any group** is fixed by the play of competition between two limits. **The lower limit** is set by the standard of living, a standard which may correspond to that of bare physical subsistence for certain groups at certain times. If wages fall below this limit men and women will not marry, the group will not be perpetuated, and obviously the wage level will not be a permanent one. The standard which is accepted as permitting marriage and the raising of a family is, of course, much higher for some groups than for others. The lower limit, then, is set by what the workers in a given group will accept and which will permit the perpetuation of the group. **The upper limit** is determined by the degree of indispensability of labor in a given group, to use an awkward but suggestive term.

If the services of an individual in any group are relatively indispensable, because of high productive capacity, limited number of equally capable workers, or intensity of demand for the given product, that individual, in common with all the other members of the given group of equal capacity, is in a position to demand a high wage. He may demand as much as the employer would lose if a single individual in that group were to leave. If a wage were to exceed this amount, an employer would reduce his working force and the resulting competition of labor would reduce wages. But he will not pay up to this limit, the limit fixed by the full contribution of a single laborer in his force, unless forced to. The actual rate of wages is fixed between these two limits, the minimum the employee will accept and the maximum the employer will pay under the given conditions, by the relative bargaining power of employer and employees. Bargaining power is affected by such a multiplicity of factors—business conditions, amount of unemployment, degree of organization of workers and employers, etc.—that no discussion of this subject can be attempted.

RENT ELEMENT IN WAGES.—In the preceding discussion equality of ability within each group has been assumed, for the purpose of simplifying the argument. Such an assumption is not erroneous, in so far as the determination of a basic wage rate for each group is concerned. In practice, however, there are many **variations from the basic rate,** variations due to individual differences. These differences are quite analogous to those differences between plots of land which give rise to rent, and hence there exists what is called a "rent element" in wages. The man of exceptional ability will command a return above the standard, just as a particularly favorable site will yield an exceptional return. Such differences of ability, however, do not by themselves explain how wages are determined; the effects of such differences are merely superimposed upon the effects of the forces described above which determine the basic rate of wages in a given group.

This account of the factors affecting wages necessarily lacks the definite and exact appearance which the so-called "scientific" wage systems possess, but in that respect is truer to life than they. There is no one theoretically just and correct wage. What we actually have under the present system is a

struggle for the product of industry. The share each factor gets depends upon its strategic position, in a bargaining sense, and its reward varies consequently from time to time and from place to place as the conditions affecting this strategic power vary. This is notably true in the case of labor. In the determination of wages, however, this struggle is conditioned by the existence of fairly definite upper and lower limits to the fluctuations of wages.

COMPETITIVE AND MONOPOLY PROFITS.—The factors determining the amounts which the business organizer must pay for the services of the other agents of production have been briefly outlined. These payments having been made, the remainder, if there is any, constitutes profits. Profits are thus **a residual share** and may be expected to vary much more widely than the other shares. Under very favorable conditions they may be exceptionally large, and they may fall below zero when the conditions are adverse. The factors affecting profits are numerous—the degree of risk undertaken, exceptional individual efficiency, monopolistic advantages, or temporarily favorable conditions which may be due to any one of a number of causes.

COMPETITIVE PROFITS.—The distinction between profits which rest upon permanent or semi-permanent conditions of a monopolistic nature, such as the control of a secret process or of a patent, and those which arise from advantages which are only of a temporary nature, is an important one. The latter are termed "competitive profits," and their characteristic feature is a tendency to disappear under the pressure of competition. If ever a thoroughly **static economic condition** were attained, there would be no profits of this type. Business managers would secure a reward for their labor only, and nothing in addition. But in a system characterized by **constant change**—new inventions, new industrial processes, new business methods—opportunities for competitive profits are always open. Such profits possess a Protean elusiveness; they are ever tending to disappear, but ever present in new forms. Profits derived from monopolistic advantages, on the other hand, are not subject to the encroachments of competition. As long as the advantage remains, the profits are certain.

Economic Organization and the Price System

THE FUNCTIONS OF MONEY.—In the preceding pages the factors of production have been described and the nature of the chief economic processes indicated, with primary reference to the production and distribution of goods. Actual economic goods are, of course, of fundamental importance in economic life, for in the last analysis the efficiency of our economic system depends upon the quantity of goods produced and the degree of equality attained in the distribution of these goods, with due regard to the maintenance of necessary capital equipment. But to facilitate the production and distribution of goods, man has found it necessary to employ a medium which of itself may satisfy no economic need nor serve any final purpose. This medium is money.

The **direct economic functions** of money are familiar and require no detailed explanation. Money's primary service is performed as a **standard of value** and as a **medium of exchange.** Money is a yardstick for measuring the value in exchange of economic goods of all sorts, and a universally desired medium for the possession of which men will part with their products in order that they may secure others. In a ruder and simpler economic system these services might be viewed as of minor importance, subordinate to the main economic processes concerned with the production and consumption of goods.

But with the growing complexity of the economic system—the ever-increasing division of labor and specialization of function, the constantly greater importance of exchange and the resulting interdependence of individuals and economic units—this medium has come to play a commanding rôle in economic life. Instead of occupying a merely incidental place it has become a factor affecting vitally, both for good and ill, every economic process. Economic activities have come to be carried on almost universally within an all-encompassing system of prices, which has almost the characteristics of an organic entity, so finely articulated are the parts, so intimate the correlations within the structure of prices. It will assist in an understanding of economic processes if the nature of this system of prices and the part it plays in the functioning of the economic system are briefly outlined.

PRICE MARGINS AND THE MOVEMENT OF ECONOMIC GOODS.—Economic goods move from original producer to ultimate consumer down a number of parallel and connected channels, passing from the extractive stage through the hands of middle men of various degrees and kinds and along various routes of transportation to reach the hands of the consumer at last. But movement results only when an impetus is given, when some force is in operation. What is the force which thus carries a bushel of potatoes, a ton of coal, a pound of cotton along this channel? The stimulus is the **desire for profit,** and the means of satisfying this desire are afforded at every step in the process of production and marketing by a suitable margin between the buying price (or cost of production) and the selling price.

The satisfactory adjustment and maintenance of such **price margins** is essential to the functioning of the whole economic system. Goods move uninterruptedly along the channels which have been dug for them only when appropriate price differentials are maintained all along the route. Original producer, manufacturer, transportation agency, middleman, all must operate on suitable price margins if they are to perform their services. This movement of goods depends upon a satisfactory relation between prices, upon suitable conditions in the environing system of prices. Temporarily, goods may move without a satisfactory differential—the farmer may let his wheat go below cost; the miller may sell at a loss. But no permanent flow is possible under these conditions.

NECESSITY OF PROPER ADJUSTMENT OF MARGINS BETWEEN BUYING AND SELLING PRICES.—The mere existence of a margin between buying and selling prices is not enough; the margin must be properly adjusted. If it is too narrow at any stage, goods will accumulate and something akin to a log jam will result—a situation not uncommon during certain stages of the business cycle. Too wide a margin, on the other hand, may reduce consumer buying or may interfere with the marketing process by inviting price-cutting on the part of certain distributors. The smooth, normal flow of the great rivers of economic goods produced annually is therefore dependent upon the existence of proper conditions within the price system, upon suitable relations between the parts of that system.

We have described above one set of the ties which bind prices together. The price of bread is related to the price of flour, the price of flour to the price of wheat. And it has been pointed out that, apart from the mere fact of relationship, the size of the differential prevailing at each stage is a matter of importance. We may view the whole **field of commodity prices** as consisting of series of relationships of this sort, running forward from raw material to final product. But in addition to these vertical ties, as one may view them, there are innumerable other ties connecting commodity prices and other ele-

ments in the price system, ties which link together separate sets of prices and establish homogeneous groups within the broad system.

PRICES OF RAW MATERIAL GROUPS.—Considering first commodity prices alone, various divisions have been set up. On the basis of organic character several classes of raw materials may be distinguished, the chief classifications being mineral products, forest products, animal products, and farm crops. There are certain characteristic peculiarities of the prices of commodities in each of these groups. Wesley C. Mitchell has made detailed comparisons of these groups for the period 1890–1913. The **prices of mineral products,** he found, fluctuate in accordance with business conditions, rising sharply during periods of prosperity, breaking in times of crisis, and moving sluggishly at relatively low levels during periods of depression. The reason for this correspondence lies partly in the conditions of mineral production—production may be easily and promptly speeded up or reduced in accordance with demand conditions—and partly in the fact that the demand for mineral products comes from construction and manufacturing industries which are most directly affected by prosperity and depression. The **prices of forest products** during this period showed a steady upward movement more pronounced than for any other class of raw materials, a result of continuously depleted natural resources and increasing costs of production. Price fluctuations in this group in general coincided with changes in business conditions, though not so closely as in the case of mineral products. The **fluctuations of farm crop prices** were violent, and showed no direct relation to business conditions. Weather conditions are the immediately important factor in the movement of crop prices and, as a result, these prices are often rising when general prices are falling, and the reverse. The **prices of animal products** are to some extent affected by the weather, but fluctuate with external business conditions much more closely than do farm crops.

PRICES OF CONSUMERS' GOODS AND PRODUCERS' GOODS.—Similar significant differences are found when manufactured goods are divided into two classes, consumers' goods (goods ready for immediate family consumption) and producers' goods (goods to be used in further production). The latter fluctuate more widely in price, and follow business conditions more closely than do the former.

OTHER CLASSIFICATIONS OF PRICES.—The system of prices may be broken up into further groups. **Manufactured goods** behave, with respect to price, in ways quite different from those of raw materials. **Retail prices** and **wholesale prices** have fundamental differences. Goods or services sold under regulation will obviously differ, in the matter of price movements, from goods and services sold under competitive and unregulated conditions. The prices of goods produced under monopolistic or semi-monopolistic conditions are generally steadier than those of goods subject to competition. Other elements than commodities enter into the price system, forming part of the complex net which surrounds business enterprise. The prices of human services, of land, of capital and credit, the prices of business enterprises themselves, have characteristic features and fluctuations. But enough has been said at present to indicate how numerous are the parts which make up the organism of prices, and to show how this organism has been, in part, analyzed.

PRICE MARGINS AND PROFITS.—The existence of appropriate price relations is important in even a wider sense than that suggested above. The primary motive to business activity under modern conditions is, as has been noted, profit. The business man buys and sells, organizes and administers,

because thereby he hopes to make profits, pecuniary profits. The importance of the rôle played by business enterprise has been indicated in the preceding pages. It is the active, organizing, directing, initiating factor in economic life today. The economic system as we know it would not function without suitable profit margins which will induce such activity.

This is not to say that some other system might not work; other arrangements, perhaps more equitable and more in accord with ethical standards, are conceivable. But our present economic system functions efficiently only under the **stimulus of profits.** When price relations permit suitable profits to be reaped, goods flow, houses are built, employment is steady. Abnormally large differentials may impair the functioning of the system, just as too narrow margins may check business enterprise and cause stagnation. The conduct of the whole system and the proper functioning of every part of the immense structure which has been built up for meeting economic needs, depend upon the existence of suitable profit margins, and these depend upon price relations. The production and movement of goods, the employment of labor and capital, the full use of natural resources—all are conditioned by price relations.

PRICE MOVEMENTS OF VITAL IMPORTANCE.—So all-pervasive and vital is the influence of prices that it is idle to attempt to study the working of the economic system by considering the movement of goods alone. The wide extent of **the price influence** has by no means been fully revealed in what has been said above. The industrial and geographical division of labor which has been so important in the development of the present economic system has been feasible, in the refined form to which it has been carried, only because of the existence of a fully developed price system. It is inconceivable under other conditions. In the division of the product of industry among the factors of production, the price system plays a central part. Land owner, capitalist, laborer and business man all receive their shares in the form of **money incomes.** Their services or the services of their property are bought, much as commodities are bought, and their co-operation thus facilitated. It is difficult to conceive of efficient co-operation under other conditions.

PRICE SYSTEM AND THE CO-ORDINATION OF ECONOMIC ACTIVITIES.—The final significant service which the price system performs, a service not distinct from those already mentioned but including them all, is that which has just been suggested, that of serving as a medium through which **order and co-operation** are introduced into the economic system. The nature of this service requires some explanation.

Minute division of labor in a manufacturing or mercantile establishment increases the difficulties of administration. It becomes harder to secure the proper co-ordination of the specialized activities of the different workers which is essential to productive efficiency. So in an economic system characterized by the high degree of industrial and geographical division of labor which is so marked a feature of the existing order, the perfection of co-ordination is vital. Consider the situation of New York City, an agglomeration of 6,000,000 persons, engaged in highly specialized activities. It is essential to the very existence of this mass of people that supplies of meat, milk, grain, vegetables, fruits and coal be brought to the city in the proper quantities at the proper times. There is no one human brain which directs and apportions the flow of goods into the city.

Similarly, over the whole globe goods are moving back and forth in mighty volume between the specialized centers of human activity, and if the flow is jammed, or if there is an imperfect adjustment in time or in quantity, unem-

ployment, suffering, perhaps starvation, result. Seldom do such maladjustments occur. The precision and timeliness with which these diverse movements are adjusted is a marvelous thing, when one considers that there is no directing hand to follow the multitude of trains and ships and to adjust their movements to the needs of the peoples of the world.

COMPETITION AND THE PRICE SYSTEM.—The **regulating factor** is, of course, competition, working through the medium of prices. The price mechanism reacts immediately to a shortage or surplus of goods anywhere on the occupied globe; exceptionally high or low prices stimulate or retard the flow of goods, correcting at once the conditions which gave rise to abnormal prices. Not only is the flow of goods so regulated, but an efficient distribution of economic labor is secured in the same way, through the reactions of the price system to maladjustments of supply or changes in demand. It is the **system of prices,** encompassing the structure of organized and specialized industry, through which this regulating agent, competition, functions.

Yet, effective as this regulating agent is, it is by no means perfect in its operation. A few generations ago economists were wont to deify unrestricted competition and the freedom of enterprise which went with it, bu a fuller experience with competition under modern conditions has demonstrated that there are serious dangers attached to its unrestricted operation. Moreover, the price system through which modern competition functions, and which serves as the regulating medium in economic life, is itself subject to disturbances which may seriously impair its usefulness. When the price system is out of joint, it no longer transmits in ungarbled form messages which reflect the economic needs of the people everywhere, and as a result delicate economic relations are disturbed and the free flow of goods and services is prevented.

The **disturbances** which thus affect the price system are by no means simple or easily explained. Some of the effects of these changes have been indicated. These may be summarized and certain general causes suggested.

CHANGES IN PRICE DIFFERENTIALS.—In a profit-seeking world price differentials furnish the incentive to the activities which keep goods moving from producer to consumer. It is by no means desirable that these margins be fixed, of course. An increase in demand for a particular type of goods stimulates the flow by increasing the margin, and a falling off in demand has the reverse effect through effecting a decline in the margin. Flexibility is essential to the functioning of an economic system which meets the needs of a growing and changing society, and flexibility would be impossible with constant price relations. Such changes as we have in mind here are localized, marking a transfer of demand from one article to another. A prompt reaction of prices to these changes is highly desirable. But when price differentials are increased or decreased generally, or for large commodity groups, without corresponding changes elsewhere in the economic system, that is, when the underlying reason is not a transfer of consumer demand, serious trouble may result. Increased differentials may speed up production and distribution beyond consumers' needs, and decreased margins may have the reverse effect, impeding the proper flow of goods. Either result may cause economic trouble.

EFFECT OF GENERAL PRICE CHANGES.—Similarly, general price changes may unduly expand or abnormally contract the profit margins which play such an important part in the functioning of every part of the economic system. **Large margins** tend to cause the feverish activity and unhealthy expansion which bring about a crisis, and **insufficient profit margins** constitute a brake to necessary business activity.

Again, general price changes seriously disturb the process by which the joint product of the agents of production is apportioned among these factors. Rising prices may swell the share of the business leader at the expense of labor or of the lender of capital, and falling prices may reverse the process, for changes in the monetary rewards secured by certain of the factors of production always lag behind commodity price changes, and thus the real income, in terms of bushels of potatoes and suits of clothes, which a given money income represents may be seriously altered by a price change.

EFFECT OF IRREGULARITY OF PRICE CHANGES.—The irregularity of price changes may also work hardships on specialized classes of producers or specific industries. When a general rise or a general fall of prices is under way, the movement is seldom uniform in all lines. Thus laborers, business leaders, capitalists and land owners whose interests lie in certain industrial fields may suffer alike, while other industries are reaping the rewards of a propitious price turn. Where such inequalities represent fundamental economic alterations, as the dying out of an old industry, such suffering is unavoidable, but when it is due to the irregularities of a price revolution it is economically wasteful.

GENERAL RELATION OF THE INDUSTRIAL SYSTEM AND PRICE SYSTEM.—This outline will have served its purpose if it has shown how intimate and vital is the connection between the industrial system, which is primarily concerned with goods, and the environing price system. The former is controlled and regulated at every turn through the latter; the disturbances which affect the latter react immediately upon the former. A sound and well controlled price system is essential to the healthy functioning of the industrial system, and such a price system has not yet been secured.

There is no general agreement among economists as to precisely how the general price changes are brought about. But there are certain general relations which are important in connection with these changes.

FACTORS AFFECTING THE PRICE LEVEL.—A general change in prices is to be distinguished from changes in the prices of a number of individual commodities. **Individual commodity prices** are constantly changing as conditions of supply and demand in specific lines are altered. Such movements are essential to the normal functioning of a dynamic economic system. When the price level is constant such individual changes are counter-balanced by contrary movements in the prices of other commodities. But a change in the **general level of prices** takes place when the movements of individual prices in one direction exceed the movements in the other direction. Thus 60% of all price transactions in one month may be at higher levels than the corresponding transactions during the preceding month while 40% may be at lower prices. The general level of all prices would be higher in the second month. The price level is, therefore, to be conceived of as an **average.** Prices are moving in diverse directions at any time. When upward and downward movements cancel each other, the price level is stationary. When out of the multitude of price changes more are in one direction than in the other, the price level is rising or falling. What conditions attend such a rise or fall in the level of general prices?

PRICE EQUATION.—Since a price is merely a statement of the value of any goods in terms of money, it is obvious that any single price depends upon the quantitative relation between goods offered for sale and money offered for goods. There are conditions lying back of these two factors which must be taken account of in any study of a given problem of price determination, but

in the actual settlement of a market price the complex of forces affecting demand and supply express themselves in money offered for goods and goods offered for money. In the same way the relation between the total goods offered for sale over a given period and the total of money (in any form) offered for goods must determine the ratio at which goods and money change hands. When total goods and total money are in the balance, the ratio is an average of prices or what is termed the **price level.**

The price level, then, depends upon the relation between quantity of goods and quantity of money. (The term "money" in this sense must be understood to include purchasing power in the form of commercial or bank credit, as well as the ordinary forms of metallic and paper money.) When the situation over a period of time is taken into account, as it must be in studying changes in the price level, it will be recognized that the amount of money offered for goods depends not alone on the absolute amount in existence, but on the rapidity of its circulation. The efficacy for trade purposes of a given sum of money over a period of 12 months would be doubled if its velocity of circulation were doubled. If we let M represent quantity of money, V the velocity of circulation of money, M' quantity of credit, V' velocity of circulation of credit, T the volume of goods and services entering into exchange (the trade factor) and P the average price at which these goods and services change hands (the price level), the relations outlined are described by the following equation:

$$MV + M'V' = PT$$

A study of the relations between the factors represented in this equation will make clear the conditions which enter into a price movement. An increase in any of the factors on the left-hand side of the equation will serve to raise prices, provided the volume of trade remains constant, while a decrease will have the reverse effect. The thorough-going believer in the so-called **quantity theory** of money (strictly, a quantity theory of prices) explains all price movements as the results of changes in some one of the other five factors in this equation. Prices are looked upon as the passive element, following movements in the other factors. Thus the tremendous rise in prices here and abroad during the war is looked upon as the result of increases in the volume of money and credit. The floods of irredeemable paper money abroad, the tremendous expansion of credit attendant upon the development of the Federal Reserve System, facilitated by the great increase in gold holdings in this country—these are held to be the direct and active factors in the price revolution. Opponents of the theory contend that prices themselves may play an active part, that a rise in prices due perhaps to a sharp increase in demand will call more purchasing power into existence. Thus a merchant may be handling a given volume of trade with an average bank credit of $10,000. If prices double he may need a credit of $20,000 in order to handle the same physical volume of trade. The rise in prices called new deposit credits into being.

The elements in the equation are so difficult of actual measurement that the controversy has not been settled. That there is a close relationship between quantity of money and quantity of goods is obvious, however. Whether an increase in the money factor causes or merely facilitates a rise in prices need not concern us here. It is sufficient for our present purpose to recognize the connection between these two factors. A key to the problem of price changes is furnished and methods of controlling the general level of prices are indicated by this theory.

CONTROL OF PRICE MOVEMENTS.—The violent price changes of the last 10 years have so dislocated internal and foreign trade relations, and have

at times so upset that equilibrium which is essential to business stability, that the problem of preventing such violent fluctuations has come to the fore in economic discussion. Those with the most definite views as to method are the out-and-out quantity theorists, notably Prof. Irving Fisher. The **essence of Fisher's plan** lies in the proposal for a compensated dollar which is designed to replace the present dollar, of fixed gold content and varying purchasing power, with a dollar of varying gold content and, it is hoped, a constant purchasing power. These changes in the gold content of the monetary unit are to offset the effect of price fluctuations upon purchasing power, and are expected to check any but minor changes in the general level of prices. Other plans to the same end have been proposed. Of some current interest is the suggestion that the Federal Reserve Board so manipulate the credit resources of the country as to prevent marked price changes. The Federal Reserve Board itself has refused to use its power to any such end.

While none of these proposals may ever be carried out in practice, they are significant as attempts to extend man's control to a field which has largely been undirected and unregulated in the past. The individual industrial unit has been studied in detail and comprehensive programs looking toward more scientific administration have been carried out. But the system of prices which binds these units together, which furnishes the medium through which economic forces act, has come to occupy its dominating position almost without man being conscious of its development. This system, with all its virtues, is not perfect. The movement toward intelligent control of the price system reflects a growing appreciation of the part that this system plays in business and of the fact that man need not necessarily be a passive sufferer from its ills.

ADJUSTING BUSINESS TO PRICE MOVEMENTS.—While these major swings of prices are not yet subject to control it is possible to frame business policies with due regard to **current price movements.** The **importance** of these fluctuations **to the individual business man** need not be emphasized. The memories of what happened to high priced inventories in 1920 are still fresh in the minds of business men, to recall merely one example of how price movements strike to the heart of the individual business. These movements are not mere economic abstractions, of only academic interest, but facts of vital concern to all who buy and sell. The highest degree of internal efficiency will not guarantee business success, unless business policies be framed with the closest regard to external developments, particularly price movements.

INDEX NUMBERS OF PRICES.—To enable these movements to be followed, index numbers of prices are currently compiled and published by various agencies, and some familiarity with these index numbers is essential to effective business administration.

A completely accurate measure of price movements would include all price transactions during a given period, all sales at wholesale and retail, all wage payments and payments for other services, all transactions in which the monetary factor appears. Such a measure, of course, cannot be compiled. Here, as in many other fields, we must be content with the study of a sample, and all index numbers of prices are thus based upon samples.

PRINCIPAL AMERICAN INDEX NUMBERS.—The three chief American index numbers of wholesale prices, those of the United States Bureau of Labor Statistics, Bradstreet's and Dun's, are alike in certain respects, though there are rather important differences.

Bradstreet's, the simplest in construction, is merely the aggregate of the prices per pound of 96 commodities. Since many of these articles are not

quoted on the "per pound" base, this involves a reduction of the original quotations to this base. A change in the price level is thus indicated by a change in the total cost of these 96 articles. These totals may be reduced to percentages, using any desired month or year as the base of these calculations.

Dun's index is of the same sort, an aggregate of actual prices, except that more commodities are included in the sample (about 300) and that the prices of these commodities are weighted in proportion to their relative importance. The logic of this weighting process is obvious, for a given change in the price of wheat, for example, is much more important than an equal change in the price of peanuts.

The index of the Bureau of Labor Statistics is more comprehensive than either of the other two, being based upon 404 price quotations, and the commodities included are more representative of the general field of commodities exchanged at wholesale than in the case of the other index numbers. This index is constructed by securing a weighted aggregate of actual prices, the aggregate for any date being expressed as a percentage of the 1913 total.

DIFFERENCES BETWEEN THE THREE INDEX NUMBERS.—This very brief account does not permit a detailed discussion of certain important differences between these three index numbers. In comparing them, or in using any one of these as an index of price changes, these differences must be held in mind. The most important are due to differences in the commodities included. Thus **Bradstreet's is heavily weighted with raw materials,** in particular with textiles, and its movements are affected to a greater extent than the other index numbers by raw material and textile price movements. Since raw material prices are more sensitive to business changes than the prices of manufactured goods, Bradstreet's index is a fairly sensitive barometer of business conditions. **Dun's index gives greater relative weight to foods.** Food prices are affected by weather and crop conditions as well as by business conditions and this index number may at times reflect changes of the former rather than of the latter type. **The index of the Bureau of Labor Statistics is based upon prices at wholesale of a great variety of commodities,** the various types being more adequately represented here than in the construction of either of the other index numbers discussed above. Manufactured goods bulk large in the commodities included, and since the prices of these goods are generally more stable than those of raw materials the index is less sensitive than is Bradstreet's, reflecting only the major movements of prices in general. It is without doubt the best general index of wholesale prices, though for certain specific purposes Bradstreet's or Dun's may be preferred.

INDEX NUMBERS OF COST OF LIVING.—Index numbers of retail prices and of the cost of living are also currently published and serve as useful guides to movements in these two fields. The difficulties attendant upon the collection of data are so numerous and there are so many technical problems connected with the weighting and averaging of the data when collected, that the degree of confidence attaching to measures of wholesale price movements cannot attach to index numbers of retail prices and of living costs.

SUMMARY.—The economic system functions through the instrumentality of prices, and its behavior cannot be understood unless the important part played by price relations in the flow of goods and in the apportionment of the product of industry be appreciated. The price system, however, does not function perfectly. Wide price fluctuations occur, and these throw the economic system out of gear, feverishly accelerate or choke the flow of goods from producer to consumer, impoverish some producers while pouring unearned gain

into the laps of others, and work hardship by altering the shares in distribution. The study of these price movements has shown that there is a fundamental relation between price changes and changes in the volume of money and this discovery has led to many proposals for the regulation of prices. While such price regulation is not probable in the immediate future, it is yet possible to avoid the worst effects of price fluctuations by studying the movements of index numbers of prices and by framing business policies in the light of the knowledge thus obtained.

Business Cycles

CRISES AND PANICS AS PHASES OF THE BUSINESS CYCLE.—Financial panics and business crises have been characteristic features of American industry for the past hundred years. Recurring with a fair degree of regularity, the breakdowns of business which have accompanied these crises have brought wide-spread distress to large classes. The most recent major crisis was that of 1920, which is still fresh in the memories of business men and of employees. But back of 1920 stretches a long succession of similar periods of painful liquidation—1914, 1907, 1903, 1893, within the lives of the present generation of business men. Still farther back, the years 1873, 1857 and 1837 spelled disaster for the men of those days.

These crises, with the panics which almost invariably accompanied them, stood out as dramatic and perplexing economic events, and many theories in explanation of them were put forward. As long as each crisis was looked upon as a single isolated event, to be explained in terms of its own peculiar causes, little progress was made in the attempt to account for such catastrophic interruptions to the usual course of industry. Some outstanding political event or the failure of some leading concern was held to be responsible for the industrial break, with the result that nothing was learned which might be of aid in the future conduct of business, in preventing the recurrence of similar disasters.

This view of panics and crises as detached events, attributable to special causes, has gradually been supplanted in the minds of business men and of economists by the conception of a **constantly operating cycle,** a constant succession of changes in a dynamic industrial order, of which the business crisis is but **one phase.** With this change in viewpoint the attempt to explain each panic as a separate phenomenon has been given up. Men seek today to ascertain the general sequence within the round of events which is termed the "business cycle," to explain how and why one phase of the cycle leads into another, and to determine the character of the forces which drive the business system on the unceasing round of depression, revival, prosperity and crisis. These problems have by no means been completely solved. The business cycle remains in part an unexplained phenomenon, in so far as ultimate causes are concerned. But much has been learned as to the nature of the events occurring during the business cycle and this knowledge is lessening the violence of the cyclical swings of business and is mitigating the evil effects of these swings upon business and society.

CHARACTERISTICS OF BUSINESS FLUCTUATIONS.—A study of the chart in Fig. 1 reveals clearly the characteristics of these business fluctuations. This chart is based upon an index of general business activity, constructed by the Statistical Division of the American Telephone & Telegraph Co., covering the period from 1877 to 1924 by months. (The method of construction is discussed at a later point.) The heavy black horizontal line in the center represents a normal state of business activity, the fluctuations in the curve

Per Cent
20 15 10 5 0 5 10 15 20
Normal
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1877 1878 1879 1880 1881 1882 1883 1884 1885 1886
Per Cent
20 15 10 5 0 5 10 15 20
Normal
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1887 1888 1889 1890 1891 1892 1893 1894 1895 1896
Per Cent
20 15 10 5 0 5 10 15 20
Normal
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906

Per Cent
Normal
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1907 1908 1909 1910 1911 1912 1913 1914 1915 1916
Per Cent
Normal
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1917 1918 1919 1920 1921 1922 1923 1924 1925 1926

FIG. 1. Composite Index of General Activity Showing Cyclical Fluctuations in American Business from 1877 to 1924

indicating deviations above or below normal. The cycles, while fairly regular in their recurrence, are not constant in length nor in amplitude, and many sharp and irregular minor movements are superimposed upon the cyclical fluctuations.

The detailed discussion of the cycle and of the methods by which business men may adapt their enterprises to its phases may best be preceded by a brief statement of the effects of the cycle upon business men and other classes in the community. The **economic and social losses** due to the cycle should be appreciated if full advantage is to be taken of the methods which are open for avoiding the worst of these losses.

LOSSES OF BUSINESS MEN DUE TO THE BUSINESS CYCLE.—In indicating the nature of certain of the losses suffered by the business community as a result of the cyclical swings of business, the impression should not be given that all the phases of the cycle have a negative effect on business. This would be far from the truth. It does not require demonstration that the phases of revival and prosperity are marked by business optimism, rising prices and swelling profits. This discussion, however, is concerned solely with the losses which occur during crisis and depression, without attempting to measure the net effect of the cycle as a whole on the revenue of business operators.

BUSINESS FAILURES.—One of the most obvious indexes of the well-being of the business world is found in the record of business failures. During boom times these failures fall off to a very small number, while during times of liquidation and depression the number of bankruptcies is swelled to large proportions. Table 1 shows the course of business failures, as compiled by Bradstreet's, by years, from 1913 to 1924.

Table 1. Business Failures in the United States, 1913–1924

Year	No. of Business Failures	Year	No. of Business Failures
1913.....	14,551	1919....	5,515
1914.....	16,769	1920....	8,463
1915.....	19,035	1921....	20,014
1916.....	16,496	1922....	22,415
1917.....	13,029	1923....	19,163
1918.....	9,331	1924....	19,712

The depression of 1914, the prosperous war-time years, the crisis and depression of 1920 and 1921 are clearly reflected in this mortality table of business enterprise.

MEASURE OF PROSPERITY BY BUSINESS PROFITS.—Equally significant as a measure of the prosperity of business are the figures of business profits. Complete data on this subject for the business world as a whole are lacking, but in certain fields and for certain periods we have records of the earnings of various corporate groups. Table 2, showing the average monthly earnings of the U. S. Steel Corporation from 1913 to 1924, may serve as an example of the fluctuations in profits occurring in a basic industry.

Many more figures might be brought forward to prove the same point, but those given above will have sufficiently demonstrated the effect of falling prices, depreciating inventories and idle equipment upon business enterprises.

LOSSES OF LABOR.—The effects of economic cycles upon employees are equally marked. The **number of unemployed** is materially increased during

Table 2. Earnings of the United States Steel Corporation, 1913–1924[1]

Year	Aver. Monthly Earnings of U. S. Steel Corp.	Year	Aver. Monthly Earnings of U. S. Steel Corp.
1913.....	$11,432,000	1919.....	$11,966,000
1914.....	5,972,000	1920.....	14,724,000
1915.....	10,866,000	1921.....	7,726,000
1916.....	27,798,000	1922.....	8,470,000
1917.....	24,608,000	1923.....	14,971,000
1918.....	15,595,000	1924.....	12,745,000

the period of liquidation and depression, and many of those who retain their jobs do so only on a part-time basis. And this reduction in employment is accompanied by a pronounced decline in earnings.

William A. Berridge has prepared the following table[2] showing the approximate decline in the volume of employment in manufacturing industries between the height of prosperity and the lowest point of depression in certain cycles within recent years.

Between the Peak of the Boom	And the Bottom of the Depression	Employment Declined Approximately
Middle of 1903	Middle of 1904	5%
Middle of 1907	First quarter of 1908	15
Early in 1910	Middle of 1911	5
Early in 1913	End of 1914 and early in 1915	10
Third quarter of 1918	Second quarter of 1919	15
Early in 1920	First half of 1921	25–30

There is, of course, a corresponding fall in earnings at such times. Here again one lacks adequate data, but the importance of such changes is indicated by the figures in Table 3, showing the total payroll of 1,648 concerns in New York state employing more than one-third of the factory workers of the state. The figures given have been obtained by dividing the annual totals by 12, to secure a monthly average for each year of the total amount of the combined payrolls for that year.

Table 3. Payroll of Factories in New York State, 1914–1923

Year	Combined Payroll of 1,648 Concerns in New York State (Monthly Average)	Year	Combined Payroll of 1,648 Concerns in New York State (Monthly Average)
1914.....	$ 5,942,000	1920.....	$16,711,000
1915.....	6,377,000	1921.....	11,943,000
1916.....	8,366,000	1922.....	12,524,000
1917.....	9,892,000	1923.....	15,074,000
1918.....	12,481,000	1924.....	13,967,000
1919.....	13,490,000		

[1] From *Survey of Current Business*, Department of Commerce, February 1925.

[2] *Business Cycles and Unemployment*, National Bureau of Economic Research, McGraw-Hill Book Co., Inc., N. Y., 1923, p. 59.

LOSSES OF FARMERS.—Another class in the community which suffers severely from the price changes and other readjustments connected with the business cycle is that composed of the agricultural producers. The immediate business aspects of the cycle do not affect the farmer so vitally, though he is by no means completely cut off from the effects of such changes. His chief losses come from the changes in the price level and from the dislocations within the price system which change the relation between the prices of the things the farmer buys and the prices of the things he sells.

This is brought out very clearly in Table 4 by a comparison of the sets of index numbers measuring, respectively, changes in the prices of crops and livestock at the farm, in the wholesale prices of commodities other than farm products and foods, and in the purchasing power of farm products. The latter index is derived directly from the two former, being constructed to measure the value of farm products in terms of the things the farmer buys. The explanation of farm prosperity in 1917, 1918 and 1919, as well as of the distress during 1921 and 1922 in some agricultural regions, is found in the discrepancies which have developed between these sets of prices.

Table 4. Index Numbers of Price and Buying Power of Farm Products*

(Relatives, 1913 = 100)

Year	Farm Prices of Crops and Livestock	Wholesale Prices of Commodities (Excluding farm products and foods)	Purchasing Power of Farm Products
1913.....	100	100	100
1914.....	102	94	109
1915.....	100	97	103
1916.....	117	132	89
1917.....	176	176	100
1918.....	200	186	108
1919.....	209	195	107
1920.....	205	234	88
1921.....	116	161	72
1922.....	124	163	76
1923.....	135	167	81
1924.....	134	157	86

* Compiled by the U. S. Dept. of Agriculture.

GENERAL ECONOMIC LOSSES DUE TO THE BUSINESS CYCLE.—It is somewhat more difficult to measure the general economic losses which result from the unhealthy expansion and wastes of the boom periods, the forced liquidation of the crisis and the idleness of men and equipment during the period of depression. The losses in profits and in wages are the significant items to those whose individual fortunes are at stake, but a summary of such losses, even though it could be a complete one, would not serve as a final measure of the full economic loss. Wesley C. Mitchell and Willford I. King have attempted to determine the amount by which the total national income is reduced in years of depression. Their results, which are only presented as rough approximations to the truth, show that the total production of goods in the years of pronounced depression is from 15 to 20% less than production during the best years, and from 8 to 12% less than in moderately good years. These figures mean that, even when the moderately good years and not the best

years are used as standard, production in years of depression is reduced by an amount valued at several billions of dollars. The losses during such years are not balanced by corresponding gains during the exceptionally active years. Mitchell and King balance the gains against the losses over a generation, and estimate that there is a net loss of nearly 3% of the total output during this period, a loss which is traceable to the cyclical swings of business.

Apart from the actual loss in output, the **changes in the purchasing power of the dollar** which result from the price swings during the business cycle cause a transference of wealth from debtor to creditor, or vice versa, which represents a serious economic injustice, and is a cause of widespread discontent.

EXPLANATIONS OF BUSINESS CYCLE IN TERMS OF OUTSIDE FORCES.—With the shift of interest from the dramatic phase of the cycle, the panic, or crisis, to the cycle as a complete phenomenon which must be explained as a whole, the character of the explanations put forward suffered a change. A single exceptional cause acting at the time of each crisis would no longer serve to explain the cycle as a whole. The explanation must account for the entire round of events making up the cycle, and for the repetition of these events in approximately the same order in cycle after cycle. To enumerate in detail the many theories which have been advanced to account for this periodic sequence would take us far beyond the scope of the present discussion. A very brief comment may serve to place the succeeding exposition in a clearer light, in relation to other explanations.

Certain writers find the cause of the cyclical movements in the economic world in forces outside the economic system. Thus Jevons explained the cycle in economic affairs in terms of **weather cycles,** which he traced back to sun spots. Henry L. Moore finds cycles in **temperature and rainfall** which coincide in a remarkable fashion with the conjunctions of the **planet Venus.** Ellsworth Huntington relates economic cyles to cycles in **health,** which are in turn attributable to cycles in weather.

EXPLANATION OF BUSINESS CYCLE IN ECONOMIC TERMS.—As opposed to such theories, which go outside the economic system for the motivating force of the cycle, are all those which find the explanation of the characteristic cyclical phenomena of business within the economic system. **Theories** of this type may be considered as of **two classes,** though the division is not a rigorously exact one. In the first class are those which explain the cycle as a result of **maladjustments of supply and demand,** in terms of physical quantities of goods of certain types. There are many variations of this general theory, but physical quantities play a central part in all. Theories of the other class center about the **price system,** either in general terms or with reference to some specific aspect of the money economy. The moving force of the cycle is found in profit-seeking, and in **price maladjustments.**

Wesley C. Mitchell, who stands, in general, in the second group mentioned above, has formulated what is probably the most comprehensive, realistic and practically useful theory of the business cycle. The summary which follows is based, in its general outlines, upon Mitchell's formulation, the results of certain other researches being incorporated in the explanation.

PRICE MARGINS, PROFITS, AND THE BUSINESS CYCLE.—The part played by appropriate price differentials in the movement of goods has been mentioned in an earlier section. Mitchell's explanation of the business cycle in terms of prices centers about these price margins. Profits furnish the stimulus to business activity, and profits depend primarily upon two factors—**suitable margins between buying and selling prices** (or between cost of produc-

tion and selling price) and the **volume of business done.** The study of the business cycle, then, must center about these two factors, and in forecasting business changes attention must be centered upon conditions affecting price margins and volume of trading. A clue is thus given to the complex maze of business activities, in their relation to cyclical changes.

PHASES OF THE BUSINESS CYCLE.—The analysis of the business cycle is simplified by considering the changes occurring during the cycle under different heads, corresponding to the successive phases of the cycle. These phases are generally presented as four in number: **Depression, revival, prosperity,** and **crisis.** Warren M. Persons has suggested that the last of these phases is really composed of two periods, one marked by a financial crisis, with liquidation of securities, the second by a commercial crisis, with liquidation of commodities. This subdivision has some significance, as will appear in the detailed discussion.

A study of the cycle may begin with any phase, since the round of events repeats itself, with modifications, from one cycle to the next. Breaking in on this round at the end of a period of depression, we may consider the situation out of which revival develops.

SUMMARY OF CONDITIONS EXISTING AT THE CLOSE OF A PERIOD OF DEPRESSION.—No period of depression is like all others, but all such periods, when well-defined, end with a set of conditions prevailing which resemble, in their major features, those found at the close of previous periods of depression. These conditions may be briefly summarized.

1. Prices Are Low.—The general level of prices, at the end of such a period as that through which American business passed in 1920 and 1921, is low in comparison with the prices of prosperity. Thus between May 1920 and January 1922 the level of commodity prices at wholesale in the United States fell from 247 to 138 (the 1913 price level representing 100). This index, of course, relates to commodities in general, including both raw materials and manufactured goods. While the drop will have been most pronounced with respect to wholesale prices, retail prices and wages will also be relatively low at this time.

2. Business Costs Are Low.—The condition of prices is reflected in the costs of producing goods and carrying on business. Such costs are low, again, in comparison with costs during the preceding phase of prosperity. The reason for this is found in a number of causes.

(a) **Labor Costs Are Low.**—A period of depression is marked by fairly **widespread unemployment.** The competition for jobs on the part of labor of all classes results in the forcing down of wage rates. During such a period, too, the power of organized labor is likely to be somewhat weakened, a fact which conduces to the lowering of wage rates. Labor costs are low at such a time, also, because the efficiency of labor in general is at its maximum after such a period. Only the best men will have been retained during the weeding-out process which has taken place during depression, and the relative scarcity of jobs serves as a spur to endeavor.

(b) **Interest Charges and the Cost of Credit in General Are Relatively Low.**—This, obviously, does not apply to charges on account of long-term bond issues previously outstanding. But with bountiful bank reserves **discount rates** are low, though conservative lending policies are likely to prevail in banking circles. While **market rates of interest** are low at the time, they will not generally have reached their lowest point before revival is under way. This decline in interest rates is traceable to a falling off in the demand for capital

and credit during depression and to the piling up of savings, for accumulation goes on during depression, as well as prosperity.

(c) **Managerial Efficiency Is High.**—The period of depression has been marked by **rigorous competition** among sellers and by low selling prices. Business managers, faced with these conditions, have pared their expenses down to the minimum, checking the wasteful practices and expensive methods which may have developed during the boom days when profits were large and prices were high.

(d) **Capital Charges in Fixing Prices Are Low.**—Figures have been quoted on a preceding page to show the increase in business failures during crisis and depression. Another phase of the same process is the **writing down of capitalization.** This process is by no means universal, but the number of concerns passing through re-organization is large enough to be significant. There is a direct relation, of course, between capitalization and earning power. The high earnings of prosperity often lead to an increase in capitalization. With a reduction in these earnings, a reduction in capitalization may be essential. This writing off of certain capital charges serves by so much to reduce overhead and to decrease costs.

Such new concerns as have been organized during the period of depression are operating also under **capital charges** lower than those prevailing during the preceding era of high earnings. Their plants have been built, or bought in, and their equipment has been secured at relatively low rates, enabling them to enter competition under most favorable conditions.

For all these reasons, then, costs of production are low. The industrial system is in a condition of efficiency such as is found during no other phase of the cycle. Business is stripped for action. The surplus poundage carried in the form of watered stock, wasteful methods and inefficient men is at a minimum.

3. Profit Margins Are Narrow.—Though business costs are low at the close of a period of depression, selling prices are also low, with the result that the margins on which profits are based are at their narrowest. Certain concerns may even be operating at a loss, preferring to do so rather than to close down. It is often more profitable to remain in business, selling goods at a price which will cover direct costs and some share of the overhead charges, rather than to close down and suffer a complete loss of overhead.

4. Stocks of Goods Are Low.—During the phase of prosperity large inventories will have been accumulated in the hands of manufacturers and dealers. Final consumers, too, will have purchased without restraint, laying in stocks of clothes, furniture, and durable consumers' goods of all sorts. The period of crisis generally finds an abundance of such stocks in existence. These are liquidated, either in forced sales, or by slow degrees, and are worked off gradually during depression.

5. Cautious Buying Prevails.—Though stocks are low, there is no eager desire on the part of manufacturers, merchants or consumers to lay in large new stocks. After a fairly long period of sagging prices and depleted consumer purchasing power there is a feeling of caution throughout the business system. Buying is from hand to mouth, only such stocks being bought as may readily be disposed of.

6. Volume of Production and Trade Is Low.—This is a characteristic and obvious feature of depression. In practically all lines, with the single exception of agriculture, goods are being turned out and sold in sub-normal quantities. Agriculture often constitutes a notable exception, for production in this field

is subject rather to the control of weather than of business considerations. A period of low yield may coincide with a period of business depression, but the reverse is equally likely to be the case.

While production and trade fall below normal during depression, the actual loss is rather less than is generally assumed. In certain individual lines the loss may amount to more than 25% of the normal output, but it has been established that the loss in the industrial world at large seldom exceeds 10 or 12%. In terms of dollars this represents a very considerable reduction, but in relation to the total volume of production and trade in the country as a whole it is less striking.

7. Stock Prices Are Low, and Bond Prices Are Rising.—The prices of stocks reflect the prospects of profits. With sales and earnings low, **dividends** are passed or reduced, and **stock prices** suffer corresponding reductions. As will be seen, the quickening of industrial activity is evidenced very early by a revival in the stock market, but this revival does not in general appear until prospective profits at least are in sight. Bond prices, however, have generally started on their upward climb while business is yet in the doldrums. The explanation is found in the intimate relation between **bond prices** and **interest rates,** for the capital value of a bond paying a fixed return will fluctuate inversely to the market rate of interest. Interest rates will have reached their highest point during the crisis, or shortly after depression has set in. The low of bonds comes a month or two after the high of interest rates. Bond prices will, accordingly, be well on their upward way at the end of a period of depression.

THE REVIVAL OF BUSINESS ACTIVITY; EXPANSION IN THE PHYSICAL VOLUME OF TRADE.—A summary outline of the conditions existing at the close of a somewhat prolonged period of depression has been presented above. A brief relapse, such as that which occurred after the armistice, would not be marked by such conditions. The summary, however, presents a true picture of the end of the usual period of business stagnation. What is the leavening force that brings about revival? Where within the business system can the seeds of revival be found?

First, we may note the fact that during the process of liquidation numerous encumbrances to recovery have been cleared away. **Debts** have been paid or written off, **frozen credits** thawed out, and **stocks of surplus goods** worked off. The factors which exerted such a strong negative influence in preventing the continuation of prosperity have been largely eliminated.

On the positive side there are at work a number of agencies, of which three are of outstanding importance.

1. Increase in Consumer Demand due to the exhaustion of stocks of durable consumption goods. During the period of liquidation and the early stages of depression there is a let-down in buying on the part of final consumers. Clothes, shoes, carpets, furniture, automobiles, durable consumption goods of all sorts, are used longer than during the days of abounding prosperity and high wages. But after depression has run its course for some time it is inevitable that there should be a resumption of buying. It will not be at the same rate and with the indifference to price considerations which are likely to be found in prosperity, but the volume of buying on the part of final consumers will begin to pick up. Retail trade, the sales of mail order houses, sales of chain stores, will register this increase. The development within recent years of statistics on the volume of wholesale and retail trade is making it possible to follow more closely than formerly changes in activity in these fields.

2. **Increase in Population.**—The population of the United States is increasing constantly, at a rate exceeding 1,000,000 a year. The effect upon business of this increase is reflected in a constant growth in consumer demand, a growth which is not restricted to periods of depression. But after depression, when the other forces which served to stimulate production during prosperity are missing, the effect of this factor is perhaps most pronounced. Marriages, births, the normal increase in demand connected with a growing population, serve to stimulate subnormal business, to pull it back to a state of normal activity. The rate of production during depression being inadequate to meet this normal increase in needs, more active production is stimulated.

3. **Investment Demand for Industrial Equipment.**—During the period of depression **saving** goes on at a rate not materially less than that which prevails during other times. This fact, taken in conjunction with the **declining demand for capital and credit** from the mercantile and business world in general, results in a lowering of rates on long-term loans. This furnishes a strong stimulus to borrowers desiring to extend industrial equipment. Additional inducements to the extension of industrial equipment during this period are furnished by the **low labor and material costs** prevailing at this time, and by the improvements in technical methods which render old machinery in part obsolete. It is not to be assumed that this demand for industrial equipment is wide-spread in the business world. Only a limited number of the more astute and far-seeing business men extend their plants and purchase new equipment during a prolonged period of depression. There is, however, an appreciable increase in the demand for such equipment, and this increase serves to accentuate the demand which arises out of the depletion of stocks of finished consumption goods in the hands of consumers and dealers.

The demand arising from these three sources serves as an effective stimulus to an expansion in the physical volume of trade. The increased activity in building and in the replacing of old stocks results in the employment of additional labor, with a corresponding increase in the earnings of a considerable proportion of the working population. From this source there comes a further demand for consumption goods, and activity radiates from the original centers of demand until the whole business world feels the influence of reviving prosperity.

RISE IN PRICES.—The next phase of revival takes the form of a rise in commodity prices, both at wholesale and retail. This rise in prices ordinarily lags behind the increase in the volume of trade and the resulting increase in the volume of production. The reasons for the delay in the rise of prices are worthy of note, for it might appear reasonable to expect that the first effect of an increase in demand would be an increase in prices. That this increase in prices is delayed is due to three circumstances:

1. **Efficiency of Business Enterprise.**—The concerns which have survived the period of depression have been forced, as has been noted, to reduce their costs of production to a minimum. Wasteful methods and inefficient practices have been eliminated, and in this fact is found a partial explanation of the failure of prices to rise immediately upon an increase in demand.

2. **Unwillingness of Business Men to Check Revival.**—A second and perhaps more important reason is found in the mental attitude of business men at the end of a period of depression. After 8, 12, or 16 months of lean business and falling orders, signs of an increase in demand are welcomed. There is no desire to check the increase in trade, to frighten the new buyers, by a hasty price increase.

3. Increase of Profits at the Existing Price Level.—The most important reason for the failure of prices to rise immediately upon the beginning of revival is found in the fact that higher profits can be made at the existing price level, as a result of the increase in the volume of trade, so that there is no necessity of increasing prices. Most manufacturers are at this time producing below capacity. This means that a material increase in output is possible with no increase in overhead expenses. The increase in output, therefore, will result in a lowering of the unit cost of production. Increased sales at the existing price will yield higher profits.

If this is the case, the question arises as to why prices should rise at all. If additional profits are to be reaped as a result of the increase in the volume of trade, there would appear to be no reason for any increase in the price level.

PRICE RISE DUE TO CHANGING CONDITIONS.—The explanation of the price rise is found, first, in changing conditions in the commodity markets, and, secondly, in changes in production conditions.

1. As **revival gets under way,** as demand spreads, and activity radiates, the **buyers' market,** which has prevailed during depression and the first stages of revival, slowly gives way, and a **sellers' market** develops. That is, a market in which the buyers have all the advantage in bargaining power because of the excessive eagerness of sellers to dispose of their wares is replaced by a market in which the reverse is true, in which buyers are clamoring for goods, and in which the bargaining power rests largely in the hands of sellers. This change does not take place simultaneously in all parts of the business field. Only by degrees is the transfer of the balance of power effected, first in one market then in another. We should expect the price increase to occur first in those markets in which the advantage first passes to sellers, in which competition to purchase goods first becomes keenest among buyers. Where are these markets found?

The answer is fairly obvious. Increased consumer demand is reflected in new buying orders sent in by retailers to wholesale dealers. The shelves of wholesale dealers are empty of surplus stocks, so that they pass on the orders to manufacturers. Manufacturers are in no hurry to boost prices for reasons that have been noted above. They must, however, secure new supplies in order to meet the new demand. Their orders for semi-finished goods and for raw materials go back to the corresponding markets. The manufacturers of semi-finished goods, in the same position as the first class of manufacturers, accept these orders at prevailing prices, but must secure new supplies of raw material in order to fill them. All these demands, then, emanating from the ultimate consumers and passing through the various stages of distribution and the various processes of production, center ultimately in the raw material markets. The securing of these raw materials is essential to the various competing manufacturers in order that their orders may be filled. Here then is the market in which the balance of bargaining power passes from buyers to sellers. Here a sellers' market first develops, and here, as a result of the competition for raw materials, prices first rise.

The process outlined in the preceding section is repeated in other markets. The increase in demand, which is now becoming general as a result of increased business activity and increased employment, leads to keen competition among buyers—manufacturers, brokers, wholesalers, retailers, consumers—for supplies, and in this competition is found the reason for the general transition from buyers' to sellers' markets.

2. A further reason for the ultimate rise in commodity prices is found in **the increase in the volume of production.** We have noted that most of the

existing plants are operating below capacity. The increase in orders attendant upon the first increases in demand can, therefore, be accommodated with existing equipment. But sooner or later a point is reached at which this existing equipment is producing up to its full capacity. If additional orders are to be taken, new equipment must be bought and plants extended, or new plants erected. This means that the overhead costs which have been stable so far will now be increased. Additional reasons for the increase in manufacturing costs, which is characteristic of this stage of revival, are found in the increased cost of raw materials, in the decreased efficiency of labor resulting from the employment of less efficient men, and in the wage increases which accompany the increased demand for labor.

SEQUENCE OF PRICE CHANGES.—We have explained the rise in prices and have in part accounted for the differences in the rate and time at which different commodity groups increase in price. We may at this point briefly outline the general order in which prices advance when the process of revival is once under way. It should be understood that the sequence here given is by no means invariable, though the usual order of price change is that which is here indicated.

1. **Wholesale prices rise** more quickly and at a more rapid rate than retail prices.
2. In the field of wholesale prices, **raw materials** rise more quickly and at a more rapid rate than manufactured goods.
3. Among raw materials, **prices of mineral and of forest products** reflect business conditions more closely and react more readily to business changes than do the prices of crops and animal products.
4. Among **manufactured goods,** the prices of producers' goods (i.e., goods in a semi-finished stage or goods designed for industrial equipment) rise more quickly and at a more rapid rate than the prices of consumers' goods (i.e., goods in shape for final consumption).

It will be noted that as commodities approach the stage of final consumption their prices become more stable. This is due partly to the increased importance of **overhead costs,** the factors in which are relatively stable in price. It is due also to the fact that purely business considerations, considerations of profit and loss, play a more dominant part in the markets for raw materials and producers' goods than they do in the market for consumers' goods. The demand for consumers' goods traces back to definite human needs, which are fairly stable and unchanging. For raw materials and producers' goods the demand goes back ultimately to the same source, but is affected more immediately by the prospects of business gain or business loss. The demand for these goods is therefore less stable than the demand for consumers' goods, and as a result price fluctuations are more marked in these fields.

RISE IN COMMODITY PRICES FOLLOWED BY INCREASE IN WAGES.—The rise in commodity prices is followed more or less closely by increases in wages, salaries, interest rates and rents. The **increase in wages** is traceable in part to the increased cost of living resulting from the rise in commodity prices. Here we find a reason for the demand for higher wages. This demand is made effective because of the increasing scarcity of labor with the coming of business prosperity. The fringe of unemployed men who stand ready to take jobs at a moment's notice will have disappeared, labor will be harder to get, and as a result the bargaining power of labor will be stronger than it was during depression. It is during revival and prosperity that the power of organized labor increases. In certain powerfully organized trades the wage advances registered

during these periods may exceed the rise in the cost of living, but in general the price of labor rises less rapidly than the prices of commodities.

ADVANCE IN INTEREST RATES.—The advance in interest rates does not come until revival is well under way. During depression large **bank reserves** will have been accumulated, and since the demand for credit is at its lowest during this period rates will be low. Increasing activity brings some increase in the demand for bank credit and for capital, but not a sufficient increase at first to cause an advance in rates. But as the volume of trade increases and as commodity prices advance, the demand for **bank credit** and for **capital** grows rapidly, causing an increase in bank loans and deposits and a decrease in the percentage of reserves. Under these conditions discount rates and interest rates will be advanced. In general, **call loan rates** advance first, followed by **discount rates** upon time loans and later by **interest rates** upon long-term loans.

RISE IN PRICES AND EFFECT ON DEMAND FOR GOODS.—If general prices are advancing during this period, how is it that there does not occur that which was feared by business men as a possibility during the early stages of revival, namely, the checking of demand by the increase in prices? Once the swing of revival is well under way, the prices of commodities of all kinds, wages and interest rates, rents, are all climbing. This fact does serve at a later time to put a damper upon demand, as we shall see, but during the early stages of prosperity it has just the reverse effect. The anticipation of **future price advances** actually stimulates buying. Consumers, dealers, and manufacturers buy today, either because they fear that they will have to pay higher prices tomorrow, or because they expect to sell at higher prices tomorrow. There is always a greater stimulus to buying during a period of rising prices than during a period of falling prices, for under the latter conditions prospective purchasers hold off in the hope that they may buy at a lower price later.

During rising prices the ability of manufacturers and dealers to purchase at the higher prices is increased by their **increased profit margins.** But what of the **ultimate consumer,** upon whom the burden of these price advances ultimately falls? How is he able to pay the higher prices, in view of the fact that wages lag behind commodity price increases? The answer is found in the **steadier employment of labor** at this time. Even though wages may not have increased at the same rate as commodity prices, actual family earnings will have increased at a faster rate. Members of the family formerly unemployed are now at work, and all are working more regularly and for longer hours than during depression. This **increase in general purchasing power** accounts for the growth of demand in the face of rising prices.

INCREASE IN PROFITS.—As has been seen, the question of profits occupies the central place in Mitchell's explanation of the business cycle. The most characteristic feature of the period of revival from the point of view of the business man is the increase in profits. This increase is due, first, to the **increase in the volume of business** done. It is due, secondly, to a **constantly expanding margin between buying prices and selling prices,** or, in the case of the manufacturer, between cost of production and selling prices. The reasons for the increase in this margin have been indicated in the preceding sections. Most of the factors which enter into cost are more stable in price than is the finished product. Thus wages and salaries, interest rates, rents, all rise less rapidly than does the price of the finished product. Raw material prices alone

generally register a more rapid increase, but the price of raw materials is only one element and generally not the chief element in total cost of production.

INCREASE IN THE VOLUME OF INVESTMENTS.—The increase in volume of trade, the increase in prices, and then the increase in prospects of profits lead not only to renewed activity among old enterprises but to plant extensions and the launching of many new enterprises. We have noted that while the business world in general is still in the grip of depression a certain amount of **new building** has begun, that certain far-sighted business men are extending their equipment. This process continues, receiving additional impetus from the general expansion in business. During the later stages of revival **heavy investments** are being made **in industrial equipment** of all sorts. The savings which have accumulated during depression are rendered available through a **renewed demand for securities** of all sorts. Since the rates on long-term loans are low, borrowing for the purpose of plant extension and the purchase of new equipment is encouraged.

One point of importance in connection with this activity is the way in which it reacts to strengthen the general demand for goods of all sorts. When new buildings are erected, demand for labor, for raw material, and for equipment of all sorts is stimulated, and this demand reacts upon the general market. At this stage we find full-blown that feeling of business optimism which plays such an important part in the development of prosperity.

SUMMARY: GENERAL SEQUENCE OF EVENTS DURING THE PERIOD OF REVIVAL.—At this point there may be briefly summarized the events which occur during revival, paying particular attention to a limited number of indices of business conditions which the average business man follows. In submitting this summary the point should be again emphasized that there is nothing invariable about such a sequence. No cycle resembles all others with respect to the order in which events take place, but there is a certain relationship which seems to prevail on the average.

1. Increase in the Volume of Trade.—The **first sign** of reviving activity is likely to be observed in the indices of trade, particularly those which reflect consumer demand directly. Statistics of retail trade, the sales of mail order houses and of department stores are particularly useful in following developments at this time. Certain of these indices are referred to in more detail in a later section.

2. Revival of Speculation in the Securities Market.—In the preceding section no reference was made to developments in the securities market during the stage of revival, since we were concerned primarily with business developments. It may be noted, however, that the market for securities reacts immediately to a change in the prospects of business profits, even before the profits themselves have been realized. Accordingly there is a pick-up in speculative activity practically synchronous with the first signs of reviving trade. The **renewal of speculative activity** may in fact appear to precede signs of recovery in the business field, but that may be due merely to the inadequacy of our statistical record of business activity. This revival in speculation is registered in the rising prices of industrial stocks (railroad stocks do not furnish such an accurate index of business conditions proper, since they reflect legislative and other changes peculiar to the railroads), in an increase in the number of shares traded on the stock exchange, and in an increase in bank clearings and in debits to individual accounts in New York.

3. Increase in Outside Bank Clearings and in debits to individual accounts outside New York. Banking transactions outside New York register in their fluctuations changes in the volume of trade in the country at large. The New York figures are generally excluded in studying changes throughout the country because of the excessive influence of speculative dealings in New York.

4. Increase in the Volume of Production.—The statistics of the physical volume of production in basic industries reflect quite closely changes in the business situation. The coming of revival brings an increase in pig iron production, in bituminous coal production, in the consumption of cotton, and in the production of other basic commodities. Changes in these fields may be watched by observing the records of the individual commodities, or by means of one of the index numbers of the physical volume of production which are now available. (Reference is made to these index numbers at a later point.)

5. Rise in Commodity Prices.—The order in which this rise occurs for different kinds of commodities and certain of the index numbers by means of which this rise may be studied have been described in earlier sections. It is worth noting at this point that the Bureau of Analysis and Research of the Federal Reserve Board publishes monthly in the Federal Reserve Bulletin a series of group index numbers which are exceptionally useful in following price changes. Index numbers are published for the following groups:

Raw materials:
- Crops
- Animal products
- Forest products
- Mineral products

Producers' goods
Consumers' goods

The significance of this grouping will be clear from the preceding discussion.

6. Increase in Discount Rates Upon Time Loans.—Interest rates play a fundamental part in the development of the business cycle, a part which is described in more detail below. With the increase in discount rates attendant upon the reduction in bank reserves, it is apparent that the initial stages of revival are passed and that the activity characteristic of prosperity is under way.

7. Increase in Interest Rates Upon Long-Term Loans.—These rates reflect the situation in the market for capital. They generally rise after call loan and time loan rates have gone up, reflecting the intensified demand for industrial equipment which comes with the stage of prosperity.

PERIOD OF PROSPERITY.—The general characteristics of a period of prosperity need no detailed description. The forces which have been described in the preceding pages will in their natural growth and their reaction upon each other produce the conditions of general prosperity. During this period speculation is active, stock prices are high, trade is booming, the volume of production is large, profits are large, new enterprises are being launched, big dividend payments are being made, employment is steady and family incomes are high. A **spirit of unbounded optimism** prevails. This was the atmosphere prevailing in 1906 and early 1907, to a lesser degree in 1912, to a remarkable degree during the years of war-time prosperity and during late 1919 and early 1920. Our problem now is to account for the termination of this period of prosperity. Once prosperity is well under way, when earnings are high and optimism general, why should not these conditions continue indefinitely?

There is no obvious reason for the termination of prosperity in a period of crisis and liquidation. Yet such a termination there always is.

CONDITIONS ESSENTIAL TO CONTINUANCE OF PROSPERITY.—We may approach this problem by calling attention to the conditions which are essential to a continuance of prosperity. Prosperity, Mitchell has pointed out, depends for its continuance upon the maintenance of an equilibrium between certain fundamental elements in the business system. The **elements which must be kept in equilibrium,** if prosperity is to continue, have been summarized by Mitchell as follows:

1. The demand for goods must keep pace with the increasing supply, in spite of the increase in commodity prices.
2. The cost of raw materials must not increase too much in comparison with the selling prices of manufactured goods.
3. Mercantile collections must grow with mercantile credits.
4. Bank reserves must expand with demand liabilities.
5. The cost of living must not rise faster than money income.
6. Banks and investors must continue to provide the ever-increasing loan funds required by business enterprises.

DEVELOPMENT OF WEAKNESS IN PROSPERITY.—If the various elements are kept in balance we may look for a continuation of prosperity, but if there occur **maladjustments** in the rates at which these various factors grow, we may expect **weak spots** to develop and difficulties to arise within the business system. It is precisely in the development of these weak spots, in the development of stresses and strains within the economic system, that an explanation is found for the termination of prosperity and the coming of widespread business liquidation.

ACCUMULATION OF STRESSES WITHIN THE BUSINESS SYSTEM.—**1. Increasing Costs of Doing Business.**—We have noted in a preceding section that during the period of revival certain of the costs of doing business increase, but that this increase furnishes no serious obstacle to increasing activity and increasing profits. Yet as this increase in costs continues it becomes a source of ultimate difficulty. We may, therefore, note in more detail some of the factors responsible for the increase in the costs of producing and marketing goods.

(a) **Increase in Direct Costs.**—**Raw material** and **labor costs** rise, for reasons that have already been made plain. The fact should be particularly noted that the increase in labor costs is due not only to an increase in the wage rate, but is perhaps even more directly due to the declining efficiency of labor, because of the working of longer hours, the taking on of inefficient men, the fact that fear of unemployment is much less acute than in the stage of depression.

(b) **Increase in Overhead Charges.**—Overhead charges constitute a fairly **stable element in costs,** but sooner or later the forces which are causing the general price advance are reflected in an increase in overhead charges. The salaries of clerks and of executive officers must be increased with the general increase in living costs during prosperity. When leases expire they will be renewed at higher rates. The cost of bank credit is higher with the increase in discount rates. If old bond issues fall due, they must be refunded at a higher rate. Moreover, the initial costs on equipment installed and buildings erected during prosperity will be higher than the corresponding costs on old buildings or on buildings erected during depression.

(c) **Declining Efficiency of Business Management.**—During depression when competition among sellers was keen, all wasteful methods and inefficient practices had to be eliminated. But with the wide profit margins of prosperity less attention is paid to economy in the matter of details, more expensive methods may be employed and management in general tends to be less efficient.

(d) **Entry of High Cost Producers into the Market.**—The three items noted above relate in general to all producers. As an additional reason for higher producing costs we may note the return of the less efficient producers, the high cost producers, who were eliminated during the preceding period of liquidation. The higher selling prices prevailing during prosperity render it possible for many men who could not produce under the lower price conditions again to enter the market, and these formerly **extra-marginal producers** are present as weak links in the business structure.

2. Stringency in the Investment Market.—The rates on **long-term loans** advance less rapidly than the discount rates on **short-term loans.** But when the investment rates begin to advance they exert a more profound influence on the business situation. They are forced up, as we have noted, by the heavy borrowing for the new construction which takes place during the stage of prosperity. But a relatively slight advance in these rates serves as a material check to borrowing. The corporation which borrows for the purpose of erecting a new plant may be willing to pay 4 or 5% over a period of 30 years, but the directors will hesitate to saddle themselves with a 30-year loan bearing interest at the rate of 6, 7 or 8%. A decline in investment borrowing, therefore, follows fairly promptly upon an increase in the rate on long-term loans. The borrowers who have thus withdrawn from the investment market may take one of two courses. They may discontinue construction work altogether, or they may secure funds through the issuance of short-term notes running for 3, 4 or 5 years, hoping to refund these notes by the floating of long-term bond issues, at a lower rate of interest, when the notes fall due.

We may for the moment consider the effect upon the business situation of a following of the first course suggested. The increase in investment rates is reflected in a check to new construction, a check which is felt before prosperity in general has reached its peak. General business is still active and some construction continues even at the higher rates and higher costs, but there appears a noticeable slackening in orders for industrial equipment and in building of all sorts. Here we have a first serious weakening in the business situation. The demand from one strong business group falls off. The general situation is still strong, but a point of pronounced weakness is apparent in this one field. This weakness is of course reflected in the declining earnings of building workers and in the declining demand for the materials employed in construction.

3. Tension in the Money Markets.—During the later stages of prosperity there is a heavy demand for short-term loans. This is in part accounted for by the transfer of demand from the investment market to the market for short-term loans, a transfer which was explained in the preceding paragraph. But this entry of the former investment borrowers into the short-term market comes at a time when the situation in the short-term market is already somewhat acute. The demand for short-term credit has increased during revival and prosperity, as a natural result of the increase in the volume of trade. The manufacturer and the merchant who are producing and selling more goods need more credit. This natural increase is augmented by the fact that at a higher price level more credit, in terms of dollars, is needed to transact a given amount of business than at a lower price level. The difficulties of the situation are

intensified, also, by the prevalent desire on the part of borrowers to take full advantage of the favorable business conditions. The average merchant attempts to swing more business on a given amount of working capital than previously, by using a larger proportion of credit. For all these reasons, therefore, the situation in the market for short-term loans is at the later stages of prosperity somewhat acute.

But the **supply of short-term loans** is limited by the banking resources of the country. The limit has been lifted materially since the introduction of the Federal Reserve System, but there still exists a limit, beyond which the banks must put a check upon credit extension.. The increase in loans resulting from the increased demand for credit is reflected in large deposit credits. Unless the reserves upon which the deposits are based may also be increased, a situation will develop such that credit advances are increasingly difficult. Ultimately our credit system rests upon a gold basis, the gold being held largely in the Federal Reserve banks. In 1920 the credit situation became so acute that it was necessary for the various Federal Reserve banks to raise their rates of discount sharply. Such an increase renders it costly for the business borrower to secure credit.

4. Decline of Prospective Profits.—Prospective profits, as we have seen, occupy a central place in the study of the business cycle. It is the increase in prospective profits after a period of depression which serves as an essential stimulus to business revival. In the same way, as we shall see, liquidation is brought about after a period of prosperity by a decline in prospective profits.

We have described in the preceding pages the increase in the costs of production. Business activity depends for its stimulus upon the existence of a suitable margin between the cost of production and the selling prices of goods. With the increase in cost of production this margin is threatened, unless selling prices can be increased proportionately. At this point in the cycle, during the later stages of prosperity, the central problem that faces every business man is that of preserving his profits against the encroachments of rising costs on all sides.

If selling prices could be advanced by an amount corresponding to the increase in the cost of production, the difficulty might be avoided. This is possible within limits in certain industries, but for the business world in general there are definite barriers to the continued advance of selling prices.

BARRIERS TO INCREASED SELLING PRICES.—Certain of these barriers may be enumerated.

1. Public Regulation and Standard Prices.—In many industries which are subject to public regulation the prices at which goods and services are sold are set by contract or custom and cannot be advanced readily as costs creep up. This is true of railroad rates and of the charges of public utilities in general throughout the country. It is true for many business enterprises which have advertised their products at standard prices until these prices have become so identified with the goods that it is inexpedient to make a change.

2. Over-Production.—Perhaps most important as a barrier to an increase in selling prices is the situation in the markets with regard to supply. During the period of prosperity high prices and high profits have stimulated high production on the part of all producers, and have called into the market as producers many new concerns. Each individual producer, viewing the constant rise in price and the strong demand, plans his own production in a spirit of optimism, without complete knowledge of what other producers are doing. These goods, be it noted, are being produced at constantly increasing costs. It is inevitable

that there should develop a situation in which the markets are over-supplied with goods, a condition of "over-production."

The term "over-production" cannot be taken to mean that more goods are produced than can be consumed, that there are actually more goods on the market than the inhabitants of a given economic area can possibly consume. It is doubtful if such a situation has ever existed. We may have at the end of a period of prosperity a condition of over-supply only in the sense that more goods have been produced than can be sold at a profit. This is the situation that actually exists at such a time. The large stocks of high cost goods are placed on the market at a time when the buying power of consumers is suffering a check.

3. Decrease in Purchasing Power of Certain Classes.—It has been noted that during the periods of revival and prosperity consumers' demand has been increasing. Steady employment, rising wages and overtime work combine to increase the purchasing power of consumers in general. But for large classes in the community the increase in prices in general and in living costs in particular exceeds the increase in income. This is true of all those classes whose income is relatively fixed—the recipients of income from investments and the salaried classes in general. The same is often true of rather large classes of unorganized workers who are not in a position to secure the wage increases which accrue to the more fortunate and more strongly organized wage workers.

4. Accumulation of Goods with Slackening of Consumer Demand.—There is here, then, the making of a **critical situation.** High cost goods are being placed on the market in large quantities by competing producers. These quantities are growing most rapidly just at the time when the demand on the part of large classes of consumers is being checked. With consumer demand slackening, with buyers' strikes threatening, the obvious procedure is to hold the surplus stocks of goods off the market until the time is more propitious for selling. This is attempted. Large stocks are stored in warehouses, credit being secured to finance such operations. This expedient may be employed so long as credit may be readily obtained at a moderate rate. But, as we have seen, the situation in the market for credit is becoming acute. With bank reserves depleted and insistent demands from many quarters for bank credit, bank rates are increased and banks attempt to put the brakes on borrowing. In particular, they are inclined to hesitate to advance credit for the purpose of carrying large stocks of goods which might depreciate materially in price if liquidation were suddenly forced.

5. Undermining of Business Credit.—The credit standing of business concerns depends upon many factors, but in the last analysis it depends most immediately upon the **prospects of profits.** When profits are in sight a concern may secure bank credit with ease, and may secure credit from other business houses. When profits are uncertain it becomes increasingly difficult to secure credit accommodations from any source. During the period of revival and prosperity, when prospective profits are large for all types of business men, the volume of credit is extended. We have mentioned the great increase in the volume of bank credits. Equally important is the increase in the volume of credits granted by business houses to other business concerns. Goods are being bought on time to an extent not approached during depression. So long as complete confidence prevails in the stability of business in general, and of individual business concerns, this credit structure is solid, but as soon as prospective profits are threatened confidence is lost, uncertainty enters and the credit structure is undermined.

The various factors that threaten prospective profits have been outlined above. he threat to prospective profits implied in these conditions destroys confidence the solvency of manufacturers and dealers. The situation is acute throughut the business system. There is a hesitation to renew maturing loans in the eld of commercial credit and in the field of bank credit. Debtors are being alled upon to pay up.

It needs but a match to set the entire structure off. Just where the match s applied may not be a matter of great concern. Some large borrower, called pon to pay a loan based upon warehouse receipts, may be forced to sell large tocks of goods at any price obtainable. A large business house may be unable o pay its debts. A bank heavily stocked with one class of paper may be unble to meet its obligations, and may fail. A general process of liquidation, luring which the primary aim of business men is to secure ready cash and retain iquid assets, is begun. The period of crisis and liquidation is at hand.

SUMMARY OF CONDITIONS GIVING RISE TO CRISES.—A summary nay be made of the preceding section by noting the following factors which are nost important in bringing about a critical situation in the business system:

1. Costs to individual producers are high.
2. The market is flooded with goods, some produced at high prices.
3. Call rates, discount rates and interest rates are high.
4. Construction is declining, with a resulting decrease in the demand from one large group.
5. Men who are holding large stocks of goods off the market in order to maintain prices find it increasingly difficult to secure credit for this purpose.
6. There is a tendency to restrict buying on the part of large classes of consumers.
7. Business credit is generally undermined and there is a loss of confidence in the solvency of business associates.
8. The decline in prospective profits is discounted on the stock market; stocks begin to fall in price.
9. Business men and bankers may refuse to renew maturing loans; debtors are called upon to meet their obligations.

Attention should be called to the fact that the conditions outlined in the preeding paragraph need not be universal in the business world when a critical ituation first develops. Only a minority may be in trouble, a minority restricted to certain localities or to certain industries. But, as we have seen, the rice system furnishes channels by which the effect of factors operating in one art of the business world is quickly transmitted to all other parts of the busiess world. Just as revival cumulates and spreads, so the effects of stresses which develop during prosperity among certain classes of producers and merhants, or in certain parts of the country, are felt almost immediately by other lasses, or in other parts of the country.

CRISIS AND LIQUIDATION.—With the business world in the condition lescribed above, it is only a question of where liquidation shall start, for general quidation, readjustment of costs and some degree of reorganization are inevitable. The **settling up process** usually begins on the stock market. **Stocks eld on margin** are sold, this movement being stimulated by the credit strinency and the preference given to business interests as opposed to speculative nterests by bankers in general at such a time. In the business world the entral emphasis on profit making is abandoned for the time. The **maintenance f solvency** becomes the **prime aim of business endeavor.** Business men must

think of preserving their resources and of meeting their liabilities rather than of pushing their sales. There is a **general falling off of new orders** and in many cases a widespread **cancellation of unfilled orders.** The prospects of profits which were adversely affected by the conditions previously existing, are still further lowered by these developments.

The general clamor for credit forces discount rates still higher. The attempt to liquidate assets, which first causes a decline in security prices, is next reflected in **a general decline of commodity prices.** The necessity of paying off debts and meeting obligations forces many producers and merchants to dispose of accumulated stocks at any price obtainable. The decline in commodity prices follows much the same order as did the increase in prices during revival. Prices of raw materials generally decline before the prices of manufactured goods. Prices of producers' goods usually begin to fall before the prices of consumers' goods. Prices of raw mineral and raw forest products are more likely to reflect the existing business situation than are the prices of crops and animal products. The particular varieties of commodities within these various classes which first fall in price will depend upon the point within the business system at which liquidation has begun. Thus in 1920 a critical situation developed in the textile industry 6 or 8 months before the steel industry was adversely affected, and accordingly the decline in textile prices preceded the decline in iron and steel prices by some time. This is a condition, however, which might be reversed in another period of liquidation.

FINANCIAL AND COMMERCIAL PANICS.—The general decline in prices the sacrifice of goods and the adjustment of credit relations may proceed without a severe wrench. Times will necessarily be difficult, but a serious and violent disruption of economic processes is not inevitable. Whether a period of liquidation shall develop into a **financial panic** depends in large part upon the character of the banking structure. Under the old American banking system it did appear almost inevitable that a serious financial panic should accompany every major period of liquidation. The conditions of the panic of 1907 are still fresh in memory. Such panics as this have been almost unknown in England, however. The strongly centralized English banking system, with the Bank of England standing in a position of dominant importance, has enabled the English business world to pass through such periods of liquidation without severe financial strain. Solvent business men, even though temporarily in difficulties, have been able to secure ample credit accommodations, though the price paid may have been fairly high. In the United States under the old system a thoroughly solvent merchant or manufacturer might find himself absolutely unable to secure credit at such a time, with the result that he was forced to the wall.

EFFECT OF FEDERAL RESERVE SYSTEM ON PANICS.—The introduction of the Federal Reserve System in 1914 marked the beginning of a new era for American business in this respect. The first drastic period of liquidation experienced since that date was the crisis of 1920. This crisis, one of the most severe in the history of American business, did not degenerate into a panic. A severe process of readjustment was carried through without the disruption of business processes which was characteristic of similar periods at an earlier time. Solvent business men were able to secure credit accommodations sufficient to meet their needs, even though the bankers of the country were putting a brake upon inflation. We may hope that the United States has seen its last financial panic, though we may expect to go through many periods of liquidation before the swings of the business cycle are eliminated.

PERIOD OF DEPRESSION.—When the fever of the crisis has passed it eaves a widespread condition of depression. It is obvious that no immediate vival may be expected ordinarily after such a general process of liquidation. he reduction in new building and in the construction of industrial equipment enerally has not only thrown out of work large classes of producers, but it has educed the demand for basic raw materials. The falling off of orders in mer- antile and manufacturing fields has similarly resulted in the laying off of vorkers, reduction of hours of employment and decline in wages. Among a arge class of industrial and clerical workers, therefore, there has been a pro- nounced decline in purchasing power. This decline may or may not have been experienced by agricultural sections. If the general fall in prices has been ccompanied by a decline in the prices of staple agricultural products this will ave been the case, and the falling off in buying on the part of industrial workers will be accompanied by a similar decline in the purchases of agricultural dis- tricts. This decline in purchasing leads to a further reduction in output, which eads to a further reduction of employment, and **the vicious circle** repeats tself. The prospects of profits, which have been most adversely affected by he events of crisis and liquidation, are not brightened by this situation. Ac- ordingly, business initiative is dulled and activity on the stock exchange is lepressed.

BOND PRICES EXCEPTION TO DECLINE.—There is one important ex- eption to the general decline in prices, both of commodities and services, during his period, namely, bond prices. The rise in interest rates generally continues hroughout the period of liquidation, reaching a peak early in the period of lepression. With the accumulation of reserves, interest rates begin then to lecline, and this decline is reflected in an increase in bond prices, beginning arly in depression.

GENERAL EFFECT OF DEPRESSION.—The general decline in orders and n prices brings about that reduction in operating costs and increase in business efficiency which has been described at the beginning of this narrative. Busi- ness loses its surplus poundage and strips to a state of maximum efficiency. At the same time the reduction in production to a state below the current rate of consumption leads to that depletion of accumulated stocks which has been already described. There is thus brought about ultimately a condition which makes revival possible, and the cycle is again under way.

DIVERSITIES DEVELOPING IN THE BUSINESS WORLD DURING THE BUSINESS CYCLE.—It is an essential weakness of such an account of the business cycle as that which has been given above that it conveys the impres- sion that the various elements of the business world always swing through these periods of depression, revival, prosperity, and crisis at the same time or in much the same order. This is far from the truth. A study of any business cycle in detail reveals **many important diversities.** Not only do the prices of different commodities rise and fall at varying times and in varying order, not only do manufacturing and marketing activities vary in their changes from region to region and industry to industry, but there may even be particular industries or exceptional business units which actually experience prosperity while the general business world is passing through depression. These exceptions are not so numerous as to counterbalance the conditions existing in the business world in general. It is a matter of great importance, however, to note the diversities in the matter of time between the cyclical movements in different industries and in different price groups.

The National Bureau of Economic Research has gathered interesting data

bearing upon the differences between industries and upon the diversity of fortunes among different business enterprises during the business cycle. One or two examples taken from their records will indicate how important some of these diversities may be. In Table 5, which constitutes an extract from a table appearing in "Business Cycles and Unemployment," National Bureau of Economic Research, based upon answers to questionnaires used by John Whyte in circularizing the National Association of Credit Men, a comparison is afforded of the dates at which certain critical changes occurred in some selected industries during the crisis of 1920 and the following depression. Figures in parentheses indicate the number of establishments replying to the questionnaire in the manner indicated.

Table 5. Comparison of Cyclical Movements in 6 Industries

Industry	Dates When Depression Began (Commonest dates among the answers)	Dates When Sales Increased Again (Commonest dates among the answers)
Automobile	Mar. 1920 (2); Oct. 1920 (2)	Apr. 1922 (2)
Clothing	May and June 1920 (5); Aug. to Oct. 1920 (6)	Apr. and May 1922 (4); fall 1921 (3)
Electrical supplies	Dec. 1920 and Jan. 1921 (3)	Apr. 1922 (3)
Furniture	Oct. 1920 (3)	Mar. 1922 (4)
Metals	Sept., Oct., and Nov. 1920 (12)	Jan. and Feb. 1922 (10); Apr. 1922 (5)
Shoes	Mar. to July 1920 (6)	Feb. and Mar. 1922 (4)

Table 6. Months in Which 18 Commodities Indicative of the Volume of Manufacture Reached Their Highest and Lowest Production—Jan. 1919 to Feb. 1922

(Secular trend and seasonal variations both eliminated)

Dates	Commodities Reaching Highest Output	Dates	Commodities Reaching Lowest Output
1919		1920	
June	Leather, sole	Oct.	Sugar, meltings
Nov.	Cattle, slaughtered	Nov.	Tobacco and snuff
Dec.	Small cigarettes		Wheat flour
1920		Dec.	Cotton, consumed
Jan.	Paper board		Wool, consumed
	Cotton, consumed	1921	
	Wool, consumed	Jan.	Wrapping paper
	Wheat flour	Feb.	Leather, sole
	Hogs, slaughtered	Apr.	Fine paper
Feb.	Lumber, cut, total three varieties	May	Newsprint paper
Mar.	Tobacco and snuff		Book paper
	Large cigars	July	Lumber, cut, total three varieties
	Pig iron		Paper board
	Steel ingots		Pig iron
	Sugar, meltings		Steel ingots
July	Book paper	Dec.	Cattle, slaughtered
	Fine paper		Large cigars
	Wrapping paper	1922	
Aug.	Newsprint paper	Jan.	Hogs, slaughtered
		Feb.	Small cigarettes

DIVERSITY IN VOLUME OF PRODUCTION AND PRICES.—Price fluctuations show even more pronounced diversities, and nearly as varied as these movements are the differences found in changes in the volume of physical production in different industries. Table 6, taken from "Business Cycles and Unemployment," which is based upon "adjusted relatives indicative of the volume of manufacture" (Harvard University Committee on Economic Research), indicates the extent of the time differences between the turning points in the physical volume of production of 18 commodities.

Equally striking are the differences in the degree to which the production of different commodities is affected by changes connected with the business cycle. For the 18 commodities listed above, the percentage decline during the period of liquidation which began generally during 1920, varied from 74.5% of the maximum output to 34.9%. The percentage declines in the physical production of these 18 commodities during this period of liquidation are shown in Table 7, taken from "Business Cycles and Unemployment," together with the number of months during which the decline continued.

Table 7. Percentage Declines in the Physical Output of 18 Commodities from the Highest Points to the Lowest Points in the Period Jan. 1919 to Feb. 1922

(Commodities arranged in order of percentage declines.)

Commodity	Percentage Decline	No. of Months Declining
Steel ingots	74.5	16
Pig iron	72.7	16
Wool, consumed	64.8	11
Paper board	61.1	18
Sugar, meltings	60.3	7
Fine paper	58.2	9
Small cigarettes	54.6	26
Book paper	52.8	10
Tobacco and snuff	46.1	9
Cattle, slaughtered	44.3	25
Wrapping paper	43.2	6
Cotton, consumed	42.9	11
Sole leather	42.2	20
Newsprint paper	41.0	9
Lumber, cut, three varieties	37.5	17
Wheat flour	37.4	10
Large cigars	35.6	21
Hogs, slaughtered	34.9	24

An appreciation of the existence and importance of these individual diversities in price and production movements is essential to an understanding of the true nature of the business cycle. These cycles are not swings which occur simultaneously in all parts of the business structure. They are movements which begin in different regions and in different parts of the business structure at different times, which spread cumulatively throughout the business world, and which affect different elements in the business structure and different localities in varying degree.

SUMMARY OF PERSONS' EXPLANATION OF THE BUSINESS CYCLE.—The preceding account of the business cycle has been based essentially upon the studies of Professor W. C. Mitchell. His thoroughly realistic explanation

seeks to find no single or constant cause of the business cycle. He endeavors to make a detailed analysis of the actual sequence of events within the business cycle, in order to determine how the process of cumulative change which constitutes the cycle is carried through. The cycle is viewed as the result of the interaction of a number of forces which combine in complex and varying ways to bring revival out of depression and to breed a crisis during prosperity. W. M. Persons, to whose work later reference will be made, has tried to explain the cycle in much simpler terms. His explanation centers about movements of interest rates. Though not as comprehensive as Mitchell's in the number of forces taken account of, it is yet a significant and useful approach to the problem. This explanation may be briefly summarized by outlining the following stages:

1. The later stages of a **period of depression** are characterized by low interest rates which make it profitable to borrow in order to purchase securities. The prices of many securities may be at this stage so low that they yield a return greater than the rate charged for the loan. As a result, idle funds are drawn into the speculative markets.
2. An **upward movement** of speculation results.
3. The stimulus of **low discount and interest rates** extends to the commodity markets, leading to borrowing for business purposes.
4. **Competition** among speculative and business borrowers forces interest rates up.
5. A point is finally reached at which the demand for funds on the part of both speculative and business borrowers cannot be met. Business borrowers who are the constant customers of the banks are at such a time given preference. Funds are withdrawn from the speculative markets to finance business.
6. A **credit stringency** develops in the speculative markets. Rates for collateral loans, on call or time, are high. Securities are dumped upon the market, and a bear market develops. During the resulting liquidation of securities at falling prices, activity in the commodity markets is sustained and profits remain high.
7. The credit stringency extends, affecting the extension of credit for business purposes. **Bank reserves** are low, and credit can be obtained only with difficulty and at high rates. A **liquidation in commodities** is forced. Orders are cancelled, commodity prices fall, factories are closed, business failures increase and unemployment develops.
8. Upon the passing of the strain, bank reserves begin to accumulate and rates for loans to fall. Ultimately **speculative activities** are again stimulated, and the cycle repeats itself.

Having this explanation of the business cycle, Persons is primarily interested in statistical records reflecting speculative conditions, records reflecting commodity prices and business activity, and records reflecting banking conditions and discount and interest rates. By methods which he explains in detail in his account of his work ("Review of Economic Statistics," *Prel. Vol. I*, 1919) he has attempted to determine the sequence of change within these 3 fields. Dividing the business cycle into 5 phases, he has outlined the following sequence of change in the 3 groups of statistics noted:

A. The Phase of Depression:

(a) The volume of speculation and security prices are low.
(b) Business activity and commodity prices are declining.
(c) Bank reserves are increasing and rates on commercial paper are falling.

B. The Phase of Revival:

(a) Speculation in the securities markets revives.
(b) Business activity recovers and commodity prices increase.
(c) Bank reserves decline and rates on commercial paper increase.

C. The Phase of Business Prosperity:

(a) Speculative activity is checked.
(b) Business activity and commodity prices continue to increase.
(c) Bank reserves continue to decrease and rates on commercial paper to increase.

D. The Phase of Financial Strain and Liquidation of Securities:

(a) There is a strong bear market for securities; the volume of speculation declines.
(b) Business activity and the rise in commodity prices are checked.
(c) The rates on commercial paper remain high; bank reserves are depleted.

E. The Phase of Industrial Crisis and Liquidation of Commodities:

(a) Prices of securities reach bottom.
(b) Commodities are liquidated and commodity prices decline.
(c) Bank reserves reach their minimum and rates on commercial paper reach their maximum.

The Analysis of Business Conditions: Business Forecasting

RELATION TO BUSINESS CYCLE.—The attempt has been made in the preceding section to describe in a quite general way the usual sequence of events during a business cycle, and to give reasons for the changes which occur in the business world during the business cycle. We now approach the more **immediately practical problem** concerned with the analysis of business conditions and the attempt to forecast business changes. This problem is obviously closely related to the preceding one. We cannot attempt to analyze conditions and to forecast changes without an understanding of the basic facts of the business cycle. On the other hand, something more is needed in the practical work of analysis and forecasting than a general knowledge of the theory of the business cycle. We must know how this theory may be applied to the study of a specific situation and to the analysis of factors affecting an individual business.

TWO PARTS OF PROBLEM—EXTERNAL AND INTERNAL TO SPECIFIC BUSINESS.—This problem, as it presents itself to the individual business man, has two parts. It involves, first, the analysis of **general developments** external to the individual business. No business unit is completely divorced from the outside business world. General changes in prices, volume of trade, interest rates, etc., affect each individual business, no matter how circumscribed its activities may be. For this reason no business man may ignore these general changes. The first problem, therefore, is that of analyzing and interpreting changes of this sort, which are external to the individual business enterprise.

The second problem relates to the **internal operation** of a business. A given manufacturer or merchant wishes to know how the cycle affects his own production, his own costs, his own orders and sales. He must analyze these various series, determining how they have acted in the past during the business cycle,

in order that he may judge how they may act in the future. To do this he must determine how the cyclical swings in his own business are tied to the cycles in general business, whether they precede or lag behind such general cyclical changes, whether the amplitude of the swings in his own business is greater or less than the amplitude of the swings in general business.

ANALYSES AND FORECASTS OF GENERAL BUSINESS CONDITIONS.—We shall concern ourselves for the present with the first problem, relating to analyses and forecasts of general business conditions. Such analyses may be based upon various methods. The general comments of trade journals or of financial publications may be followed. Such general **non-quantitative information** is without doubt useful, but it is likely to be too abstract and too ambiguous to have practical value in connection with the problems of a given concern. A second method is based upon the **study of individual business series,** such as interest rates, pig iron production, bituminous coal production, or cotton consumption. The individual business man may follow the movements of such series, selecting those which seem to have the closest relation to his own business. A third method is to utilize the publications of some of the **various agencies** which construct **business barometers** or forecasting indices. A corporation of considerable magnitude may construct such barometers for its own use, employing materials which are particularly appropriate to its own operations. We may for our present purpose confine ourselves to a consideration of the second and third methods by means of which a business man may keep in touch with business developments and may attempt to forecast impending changes.

ANALYSIS OF INDIVIDUAL STATISTICAL SERIES.—A necessary first step in the analysis of an individual statistical series is the **graphic representation** of that series. Its general trend, and the changes in that trend, are much more clearly apparent in this graphic form than when the data are presented as a page of figures. For many purposes the study of the raw figures and of the graph based upon them may be sufficient. General changes in the past may be determined from such a study, and prospective movements estimated. As an example of such a series, the figures given in column (2) of Table 8, showing the production of pig iron from 1897 to 1923, may be presented.

GRAPH SHOWING PIG IRON PRODUCTION IN UNITED STATES.—The data in Table 8 are plotted graphically in Fig. 2. It is apparent upon inspection that the production of pig iron undergoes pronounced changes. The depression of 1908, the crisis and liquidation in 1920 and 1921, the revival in 1922 are clearly reflected in the raw figures and in the graph. If an accurate analysis is needed, however, these raw figures must be refined before conclusions may be based upon them. The figures as they stand are not in a state which permits of comparison between business conditions at different dates, as reflected in pig iron production. Thus in 1902 the amount of pig iron produced was 17.82 millions of tons. In 1914 the amount of pig iron produced was 23.33 millions of tons. It would appear from a comparison of these figures as they stand that the later period, during which the volume of production was greater, was marked by greater prosperity than the earlier period. Yet the reverse was true, as a reference to contemporary business records quickly reveals.

The explanation of this apparent anomaly is found in the fact that business series are affected by a number of forces. The figures at any one date represent the combined effect of such forces, and we may not compare data for two different periods unless allowance is made for the disturbing influence of factors

Table 8. Production of Pig Iron in the United States, 1897–1924

(Showing actual and normal production and deviations of actual from normal.)
(Unit: 1,000,000 long tons.)

(1) Year	(2) Pig Iron Production Actual	(3) Pig Iron Production Normal	(4) Deviation of Actual from Normal	(5) Percentage Deviation of Actual from Normal
1897	9.65	12.77	− 3.12	−24.4
1898	11.77	13.68	− 1.91	−14.0
1899	13.62	14.60	− .98	− 6.7
1900	13.79	15.52	− 1.73	−11.1
1901	15.88	16.44	− .56	− 3.4
1902	17.82	17.36	+ .46	+ 2.6
1903	18.01	18.26	− .25	− 1.8
1904	16.50	19.19	− 2.69	−14.0
1905	22.99	20.11	+ 2.88	+14.3
1906	25.31	21.03	+ 4.28	+20.4
1907	25.78	21.95	+ 3.83	+17.4
1908	15.94	22.87	− 6.93	−30.3
1909	25.80	23.78	+ 2.02	+ 8.5
1910	27.30	24.70	+ 2.60	+10.5
1911	23.65	25.62	− 1.97	− 7.7
1912	29.73	26.54	+ 3.19	+12.0
1913	30.97	27.46	+ 3.51	+12.8
1914	23.33	28.38	− 5.05	−17.8
1915	29.92	29.29	+ .63	+ 2.2
1916	39.44	30.21	+ 9.23	+30.6
1917	38.62	31.13	+ 7.49	+24.1
1918	39.06	32.05	+ 7.01	+21.9
1919	31.02	32.97	− 1.95	− 5.9
1920	36.93	33.89	+ 3.04	+ 9.0
1921	16.69	34.80	−18.11	−52.0
1922	27.22	35.72	− 8.50	−23.8
1923	40.25	36.64	+ 3.61	+ 9.9
1924	31.09	*37.56*	− *6.47*	−*20.8*

other than those with which we are directly concerned. What are the forces which thus affect such series as the production of pig iron?

SECULAR TREND IS STEADY TREND.—The chart in Fig. 2 reveals a steady upward trend in pig iron production. During each succeeding period of prosperity a new height is reached. Pig iron production fluctuates about a constantly higher level. It is obvious that the significance of changes in production cannot be determined unless account be taken of this constant change in base. This long-term movement of pig iron production in an upward direction is called the **secular trend.** It represents the effect of a number of factors quite divorced from the temporary fluctuations associated with the business cycle. Thus, the steady increase in the population of the United States would account for a constantly increasing use of pig iron. The change in methods of construction, involving the use of more steel and less wood, constitutes another factor responsible for this regular upward movement. Referring now to the production figures for 1902 and 1914, we may see that the fact that the later figure exceeds the earlier does not necessarily prove that better business conditions prevailed at the later date. During the years elapsing between these two dates we should expect a considerable increase in the normal production of pig iron, to satisfy the increasing demands resulting from a larger population and a greater use of iron and steel. These figures must be interpreted with

reference to some standard which may be taken to represent a normal state of affairs. In their absolute form they are not comparable. How may we secure such a **measure of the normal state of affairs?**

Various methods have been employed for this purpose. A simple and generally satisfactory method involves the representation of secular trend, of the normal long-term development, by a straight line, so fitted to the data that the sums of the squares of the deviations of the actual items from this line shall be a minimum. The method by which this is done is explained in current textbooks on statistics. Such a line has been fitted to the data of pig iron production and has been plotted in Fig. 2. The normal or trend figures are given in column (3) of Table 8.

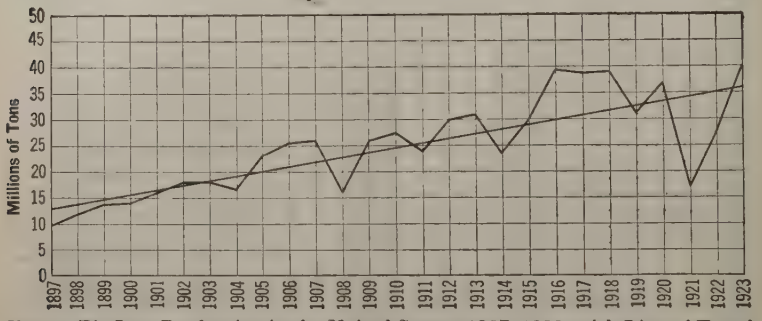

FIG. 2. Pig Iron Production in the United States, 1897–1923, with Line of Trend

SECULAR TREND OF A BUSINESS SERIES EITHER UP OR DOWN.—It should be noted that the secular trend of a business series is not necessarily positive. That is, the long-term movement may show a regular annual decline instead of an increase. This was true of interest rates for the 20 or 30 years prior to the War. It has been true, for example, of the production of horse-drawn vehicles in the United States. The concept of secular trend applies to both positive and negative changes occurring over a long period of time. Such changes are, by definition, smooth and regular in their operation, whether the movement be positive or negative.

SEASONAL VARIATIONS.—The secular trend is only one of the forces accounting for the movements of a series in time. Periodic fluctuations, of greater or less magnitude, occur in every economic series. They are themselves of two types. Over the period of a year we may have seasonal variations, repeating themselves every twelve months. In many series such seasonal variations are pronounced and important. Thus the sale of straw hats and of overshoes, the volume of sales of department stores, the price of eggs, all show a definite and fairly constant seasonal swing. Most economic series reflect these seasonal variations in activity to a greater or less degree. The seasonal swings in pig iron production are not pronounced, but they are nevertheless definitely present. The table and chart given above, being based upon annual data, do not reflect the influence of such seasonal fluctuations. Methods by which these seasonal movements may be measured are also explained in statistical texts dealing with the analysis of time series.

CYCLICAL FLUCTUATIONS.—Periodic fluctuations of another type are quite clearly present in the case of pig iron production. These are the cyclical fluctuations connected with the swings in business activity which have been described in the preceding pages. These periodic movements have not the constancy which is found in the seasonal swings. A given cyclical movement may be completed in 2 years, or it may extend over 4, 5, or even a greater number of years. But there is some regularity to such swings, a fact which is clear from a study of the graph in Fig. 2.

OTHER FACTORS AFFECTING FLUCTUATIONS IN A BUSINESS SERIES.—But we have not accounted for all the variations in pig iron production in listing the effect of secular trend, seasonal variations and cyclical fluctuations. There still remain many irregularities in the curve, sharp drops from month to month or year to year, or sudden increases which may not be accounted for by any of these fairly regularly operating forces. We have, it is clear, a host of minor factors which may affect any individual business series, such factors as strikes, floods, fires, earthquakes, wars. In brief, there are numerous movements which may be attributed to **accidental or catastrophic causes.** Most of these accidental irregularities are of minor importance, though occasionally a great war or prolonged strike may affect economic series very materially. It is not possible, in general, to measure the influence of these accidental causes. Some refined methods of doing so are available, but in the present state of our knowledge their applicability is questionable.

METHOD OF ANALYZING ECONOMIC FLUCTUATIONS.—The method employed in analyzing a business series will depend upon the object of immediate interest. It may be that our prime interest lies in the secular trend, that we are interested solely in determining the rate of long-term growth or decline. If this be the case, our investigation will end when a line of secular trend has been fitted. We may be interested primarily in the seasonal swings, quite apart from the secular trend or cyclical movements. In most cases, however, **primary interest** from a business point of view attaches to the cyclical swings in economic series. It is such swings in prices, sales, and volume of production which affect business profits most immediately and vitally. The secular trend is, by its very nature, a gradual, long-term movement, the effects of which may be easily foreseen and anticipated. Seasonal movements again are in general quite regular. The changes which are of primary concern are those which are less certain, less easily anticipated, and these are generally the ones which are associated with cyclical fluctuations in business activity.

Accordingly, the task which usually confronts the business man or the business statistician is that of breaking up data, presented in the form of a statistical series of sales, prices, or production, in order that the effects of secular trend and seasonal variations may be eliminated. The residue which is left is a composite of the cyclical fluctuations and the accidental movements. Since the latter cannot ordinarily be eliminated, they are lumped in with the cyclical swings, the assumption being made that in the long run such accidental variations will cancel themselves.

GRAPHIC PRESENTATION OF CYCLICAL FLUCTUATIONS IN PIG IRON PRODUCTION.—In Fig. 3 is a rough picture of the cyclical fluctuations in annual pig iron production, based upon the data given in column (5) of Table 8. These are the percentage deviations from normal, as normal is measured by the line of secular trend. In effect, Fig. 3 is just Fig. 2 revolved until the line of trend is horizontal. It should be noted that the deviations from normal

as here plotted, represent the combined effect of cyclical and accidental causes. We cannot, unfortunately, measure and eliminate the latter.

A similar chart could be constructed on a monthly basis by using monthly figures, correcting these for seasonal movements, and finally plotting the corrected deviations from normal, by months. Fig. 1, given on pages 24 and 25, represents an index based upon a number of such corrected monthly series.

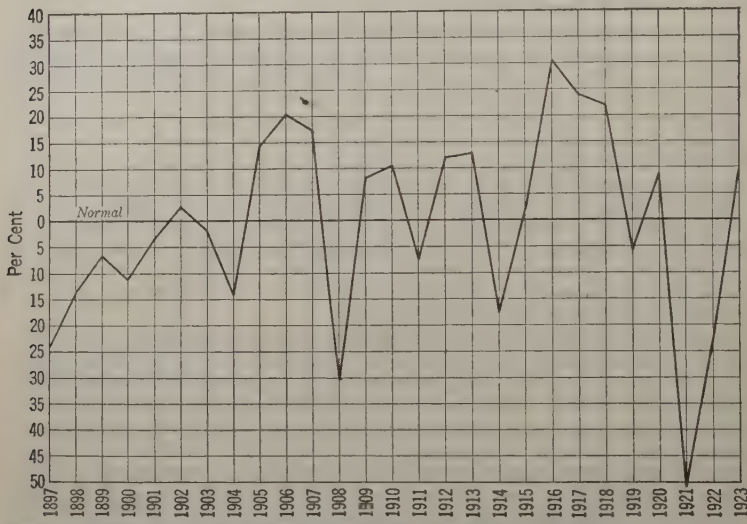

FIG. 3. Cyclical Fluctuations in Pig Iron Production, 1897–1923, showing Annual Deviations from Trend

SOURCES OF STATISTICAL DATA RELATING TO BUSINESS CONDITIONS.—The particular series which should be studied by a business man desirous of following business changes will be in part selected with special business interests in mind. There are certain series of general utility, however, which may be profitably studied by men in all industries. In the sections which follow certain sources of such general statistical data are noted, and certain important series are enumerated.

The list which follows is not designed to be exhaustive. It includes some of the important primary and secondary sources of statistical material reflecting business changes.

1. Governmental Publications:

Agricultural Year Book. U. S. Department of Agriculture.
Commerce Year Book. U. S. Department of Commerce.
Commerce and Navigation of the United States. U. S. Department of Commerce.
Annual Report. U. S. Geological Survey.
Statistics of Railways in the United States (annual). Interstate Commerce Commission.

Bulletin on Wholesale Prices (annual). U. S. Bureau of Labor Statistics.
Bulletin on Retail Prices and Cost of Living (annual). U. S. Bureau of Labor Statistics.
Statistical Abstract of the United States. U. S. Department of Commerce.
Survey of Current Business (monthly). U. S. Department of Commerce.
Federal Reserve Bulletin (monthly). Federal Reserve Board.
Monthly Summary of Foreign Commerce. U. S. Bureau of Foreign and Domestic Commerce.
Monthly Labor Review. U. S. Bureau of Labor Statistics.
Crops and Markets (weekly, with monthly statistical supplement). U. S. Department of Agriculture.
Bulletins, U. S. Bureau of the Census.
Bulletins, U. S. Geological Survey.
Bulletins, U. S. Bureau of Mines.

2. **Private Publications:**

Statistical Bulletin (quarterly). Standard Daily Trade Service, N. Y.
Commercial and Financial Chronicle (weekly). N. Y.
Bradstreet's (weekly). N. Y.
Dun's Review (weekly). N. Y.
Journal of Commerce (daily). N. Y.
New York Commercial (daily). N. Y.
Trade Journals (e.g., *Iron Age*).

A **useful summary of sources** will be found in "Source Book of Research Data," New York University Bureau of Business Research, N. Y.

CERTAIN STATISTICAL SERIES WHICH REFLECT BUSINESS CONDITIONS.—There are available numerous statistical series by the following of which business men may keep in touch with current economic developments. Sources from which some of these series may be obtained have been noted in the preceding section. Certain **individual series** which are commonly accepted as barometers of business conditions may now be enumerated. At a later point something will be said about index numbers, representing the combination of a number of business series. Such index numbers are very valuable to the student of business conditions, but they can never replace the records of individual series, to which primary interest will always attach.

For convenience, the series to be noted are classified under 6 main heads:

1. **Statistical Series Measuring the Volume of Production:**

(a) Agricultural:
- Cotton
- Wheat
- Corn
- Oats
- Barley

Estimates of current acreage and production are published monthly in "Crops and Markets" during the growing season.

(b) Raw mineral:
- Bituminous coal
- Anthracite coal
- Crude petroleum
- Copper

(c) Industrial production:
- Pig iron
- Steel billets

Unfilled orders of the U. S. Steel Corporation
Cement
Automobiles
Electric power
Consumption of raw cotton

(d) Building:
Contracts awarded

Production figures should be supplemented by data relating to inventories. Such figures are available for certain of the series named above, notably cotton, wheat and petroleum.

2. **Statistical Series Measuring the Volume of Trade:**

(a) Domestic trade:
Freight car loadings
Sales of department stores, chain stores and mail order houses
Wholesale trade (by federal reserve districts)
Bank clearings outside New York
Debits to individual accounts outside New York

Changes in the value of **outside clearings** and in the total of **debits to individual accounts** may be due either to an increase in the volume of trade represented by such transactions, or to an increase in the price level. If prices should double, the volume of bank clearings necessary to transact the same actual amount of trade would be doubled. Accordingly, in the interpretation of such value figures it is essential that they should be deflated, that is, corrected for changes in the price level. When this has been done, it may be assumed that the remaining changes reflect actual fluctuations in the volume of trade. To deflate such a series, it is necessary only that the actual value figures be divided by an appropriate index number of prices.

(b) Foreign trade:
Merchandise imports
Merchandise exports

In using trade figures expressed in dollars, the problem of correcting for changes in the price level again arises, and the process of deflation described above is necessary.

3. **Statistical Series Reflecting Price Changes:**

(a) Prices of important commodities, such as wheat, corn, cotton, pig iron, bituminous coal, petroleum, etc.

(b) Index numbers of prices:
Bradstreet's index of wholesale prices
Dun's index of wholesale prices
U. S. Bureau of Labor Statistics index of wholesale prices. A general index is published with separate index numbers of prices for the following commodity groups:
Farm products
Foods
Cloths and clothing
Fuel and lighting
Metals and metal products
Building materials
Chemicals and drugs
House furnishing goods
Miscellaneous

Federal Reserve Board's index numbers of wholesale prices. The Board compiles comparable index numbers of wholesale prices in the following countries:
- United States
- England
- France
- Canada
- Japan

For each country separate index numbers for the following commodity groups are compiled and published:
- Raw materials
- Producers' goods
- Consumers' goods
- Domestic goods
- Imported goods
- Exported goods

Fisher's weekly index number of wholesale commodity prices
Persons' wholesale price index of business cycles
U. S. Bureau of Labor Statistics index of retail food prices
U. S. Bureau of Labor Statistics index of the cost of living

4. **Statistical Series Measuring Speculative Activity:**
   Prices of industrial stocks:
   - Index compiled by Standard Daily Trade Service
   - Dow-Jones average of industrial stock prices

   Shares traded on the New York Stock Exchange
   New York bank clearings
   Debits to individual accounts in New York banks
5. **Statistical Series Depicting Financial Conditions:**
   Total loans and discounts, reporting member banks of the Federal Reserve System
   Total bills on hand, federal reserve banks
   Reserve ratio, federal reserve banks
   Federal reserve banks' discount rates
   Call loan rate, New York
   Discount rate, 60–90 day commercial paper
6. **Statistical Series Measuring Business Profits and the Number of Business Failures:**
   Net earnings, U. S. Steel Corporation
   Dividend payments of industrial corporations
   Number of business failures

USE AND INTERPRETATION OF STATISTICAL INFORMATION.—The list of individual series which has been given above includes some of the most important series currently available. Though not complete, it indicates the general subjects which should be followed by a business man desirous of keeping in touch with business conditions. The use and interpretation of such series will call for various types of study. The mere reading of the records as published weekly or monthly will not, in general, give a very complete picture. A **system of wall charts** on which the most important series are plotted will give a truer perspective for judging the significance of current developments. If, in addition, the individual series are corrected for secular trend and seasonal variation, a **comparison of the corrected figures** from month to month will furnish a very clear picture of the current situation, and will, in conjunction

with a knowledge of the usual sequence of events during the business cycle, enable impending developments to be foretold with some degree of accuracy.

The number of series which may be employed in following business developments has been increased materially within recent years. The work of the Federal Reserve Board and of the Department of Commerce under Secretary Hoover's direction has served materially to increase our knowledge of business changes by rendering available more detailed records. The work of trade associations, in so far as their records have been made public, has served the same purpose.

COMPOSITE INDEX NUMBERS OF BUSINESS ACTIVITY.—The series which have been described above have been in most cases individual in character, reflecting changes in the prices or in the production of individual commodities. Reference has been made incidentally to certain series which are composites of a number of individual series. All the index numbers of prices are of this character. The absolute necessity of constructing such a composite index in the case of price changes is evident. Any single commodity is subject, in its price movements, to the influence of so many diverse factors, which may affect this commodity alone, that a true picture of general price changes may only be secured by taking an average of the prices of a number of individual commodities. The same problem arises in studying the volume of trade or the volume of production. The production of bituminous coal, for example, is affected by cyclical movements, but it is, in addition, influenced by many accidental causes which are peculiar to that series alone. There are needed, in the fields of trade and production, index numbers which are based upon a number of individual series. In the combination of a number of such individual records we may get away from the accidental and exceptional movements peculiar to individual series, and secure a true measure of the wider movements characteristic of the trade of the country or of the physical volume of production in the country as a whole. Within comparatively recent years several such index numbers of the volume of trade and of the volume of production have been constructed. Certain of these may be briefly described, in order that intelligent use may be made of them by the man desirous of following business changes.

COMPOSITE INDEX OF AMERICAN TELEPHONE & TELEGRAPH CO.—The composite index of general business activity constructed by the American Telephone & Telegraph Co. has been based upon eleven statistical series representing production and distribution in basic industries. These 11 series, with the weight attached to each, are as follows:

	Weight
Net ton miles of freight	10
Freight car loadings	10
Pig iron production	20
Steel ingot production	10
Cotton consumption	10
Activity of wool machinery	10
Paper production	10
Lumber production	5
Leather production	5
Bituminous coal production	5
Electric power production	5
Total, 11 series	100

In the combination of these series into a single index the procedure which has been described above is employed in the analysis of the individual series. That is, an appropriate **line of trend** is fitted to each series, index numbers of seasonal variation are computed, and the deviations of the actual figures from the trend

are expressed as percentages of the normal values and corrected for the influence of seasonal variations. Thus we have for each of the 11 series a record, by months, showing the corrected percentage deviations from normal. For each month an average of these 11 values is obtained, each series being given the weight indicated in the preceding table. (In effecting this combination a further correction is needed to prevent undue weight being given to the series marked by extremely wide fluctuations. The means by which this is done need not concern us here.)

This index extends back by months to the year 1877, and constitutes the longest continuous record of fluctuations in American business. The composition of the curve has not been the same throughout. During the earlier years it was based upon a smaller number of series than at present. For the first 8 years, in fact, it was based solely upon records relating to pig iron production. The values of this index by months since 1877 are presented in Table 9. From a study of the figures as here presented and as plotted in Fig. 1, a clear picture of the cyclical fluctuations in American business may be obtained.

FEDERAL RESERVE BOARD'S INDEX OF PRODUCTION.—Somewhat similar in character, though constructed after a slightly different method, is the index of production compiled by the Division of Analysis and Research of the Federal Reserve Board. It is **based upon 22 series** relating to production in basic lines, over the period from January 1913 to date. The chief difference between this index and the one previously described is that no effort is made to correct for the influence of secular trend in the compilation of the Federal Reserve Board's index. The final figures, as published in the Federal Reserve Bulletin, express the current month's production as a relative figure, with the average monthly production during the year 1919 as base. Although no attempt is made to construct an arbitrary "normal" by the fitting of lines of trend, correction is made for the influence of seasonal variation.

FEDERAL RESERVE BOARD'S INDEX NUMBERS FOR SPECIFIC LINES.—Further service is rendered by this division of the Federal Reserve Board in the compilation of a number of very useful index numbers showing the degree of activity in specific lines. Index numbers of agricultural movements, of mineral production, and of production by manufacturing enterprises have been published for some time. More recently index numbers have been compiled for measuring changes in factory employment, in wholesale trade, in department store sales and department store stocks, and in bank debits. All these appear currently in the Federal Reserve Bulletin, and constitute one of the most useful sets of statistical measures available for the following of business conditions.

FEDERAL RESERVE BANK INDEX OF VOLUME OF TRADE.—Covering a different field is the index of volume of trade compiled by the Federal Reserve Bank of New York. This index, which is designed to measure changes in trading activities as well as producing activities, is the most comprehensive currently compiled, being based upon a greater number of economic series than any similar index. The various individual series entering into the final index are analyzed after the method previously explained, corrections being made for secular trend and seasonal variation. The corrected figures, representing primarily the effect of the cyclical factors, are combined into the index as published.

Somewhat similar index numbers of the volume of production and of trade are constructed by the **Harvard Committee on Economic Research,** and appear in their current publications.

Table 9. Composite Index of General Business Activity

(Figures indicate percentage deviations from normal.)

	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892
Jan.	− 9	− 8	−13	+ 7	+12	+11	+ 9	−10	−16*	−10	− 2	− 2	+ 6	+11	+ 5	+ 9*
Feb.	− 9	− 9	−13	+ 9	+12	+11	+ 7	− 9	−19	− 8	+ 3	− 2	+ 5	+ 8	+ 1	+14
Mar	−10	−10	−13	+11	+12	+12	+ 4	− 8	−17	− 6	+ 9	− 7	+ 3	+10	− 5	+11
Apr.	−11	−11	−13	+12	+12	+12	+ 2	− 8	−16	− 8	+ 8	− 6	+ 1	+12	− 6	+ 9
May	−10	−11	−11	+10	+12	+10	+ 2	− 7	−19	− 7	+ 8	− 2	+ 4	+17	− 7	+ 7
June	− 8	−12	− 9	+ 8	+13	+ 8	+ 1	− 6	−14	+ 3	+ 6	− 2	+ 2	+15	− 0	+ 9
July	− 7	−12	− 7	+ 7	+13	+ 5	+ 1	− 6	−11	+ 4	− 2	− 3	+ 7	+16	+ 8	+ 6
Aug.	− 7	−12	− 3	+ 7	+13	+ 7	+ 1	− 8	−15	+ 2	+ 2	+ 2	+ 6	+12	+ 7	+ 6
Sept.	− 7	−12	+ 2	+ 7	+12	+ 9	+ 2	−10	−14	+ 2	+ 7	+ 2	+ 1	+15	+13	+ 7
Oct.	− 7	−12	+ 6	+ 7	+12	+10	+ 2	−12	−12	+ 1	+ 5	+ 8	+ 8	+17	+12	+ 8
Nov.	− 7	−12	+ 6	+ 9	+12	+10	− 2	−15	−11	+ 2	+ 7	+ 2	+ 7	+ 8	+ 7	+10
Dec.	− 8	−13	+ 7	+11	+11	+ 9	− 6	−18	− 9	+ 3	+ 1	+ 3	+ 5	+ 5	+ 7	+12

	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Jan.	+12	−14	− 3	− 1	−13	− 3	+ 1	+10	− 1	+ 2	+ 3*	−10	− 5	+10	+17	−14
Feb.	+12	−16	− 9	− 2	−11	− 2	+ 1	+11	− 0	+ 2	+ 1	− 5	− 5	+ 9	+14	−15
Mar.	+12	−14	−10	− 7	−12	− 3	+ 4	+10	+ 2	+ 2	+ 2	− 8	− 2	+ 7	+15	−15
Apr.	+11	−14	−11	− 5	−12	− 7	+ 1	+ 8	+ 5	+ 4	− 6	− 1	+ 5	+16	+14	−14
May	+11	−14	− 8	− 8	−15	− 7	+ 2	+ 6	+ 4	+ 5	+ 3	− 8	− 0	+ 8	+18	−17
June	+ 5	−20	− 6	− 8	−13	− 4	+ 3	+ 6	+ 3	+ 2	+ 2	−10	− 0	+ 7	+16	−17
July	− 2	−18	− 1	− 8	−14	− 8	+ 3	+ 3	+ 4	+ 4	+ 3	−12	− 1	+ 7	+18	−16
Aug.	−13	−10	− 0	−14	−10	− 5	+ 6	+ 0	+ 4	+ 3	− 1	−12	− 0	+ 8	+16	−13
Sept.	−17	− 7	+ 1	−16	− 3	− 5	+ 8	− 3	+ 0	+ 6	− 2	− 8	+ 2	+ 5	+12	−11
Oct.	−17	− 7	+ 6	−17	− 4	− 7	+ 9	− 3	+ 3	+ 5	− 6	− 9	+ 2	+10	+13	−11
Nov.	−16	− 6	+ 4	−16	− 4	− 4	+ 8	− 4	+ 2	+ 2	−11	− 4	+ 4	+11	− 4	− 9
Dec.	−15	− 4	+ 3	−13	− 2	− 2	+11	− 4	+ 1	+ 3	−14	− 5	+ 7	+13	−12	− 8

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Jan.	− 5*	+12	+ 0	− 2	+10*	− 0	−16	+11	+17	+ 4	+ 4*	+13	−19*	−16	+ 8	+ 4
Feb.	− 5	+10	− 1	+ 3	+ 8	− 2	−13	+12	+13	+ 3	− 3	+10	−18	−11	+ 8	+ 7
Mar.	− 5	+12	+ 0	+ 3	+ 3	− 0	−12	+13	+14	+10	− 8	+12	−22	−10	+10	+ 2
Apr.	− 5	+11	− 3	+ 6	+ 5	− 1	− 9	+ 9	+12	+10	− 6	+ 9	−25	−16*	+ 9	0
May	− 3	+ 6	− 2	+ 5	+ 5	− 5	− 8	+12	+14	+13	− 2	+ 6	−25	−14	+10	− 8
June	− 2	+ 7	− 1	+ 3	+ 4	− 4	− 4	+11	+12	+10	+ 0	+ 8	−23	−11	+ 7	−16
July	+ 1	+ 4	− 2	+ 5	+ 5	− 2	− 3	+ 8	+10	+14	+ 7	+ 8	−25	−12	+ 6	−14
Aug.	+ 2	+ 4	− 1	+ 6	+ 2	− 8	− 2	+12	+10	+15	+ 9	+ 7	−21	−10	+ 5	−12
Sept.	+ 5	+ 4	− 1	+ 5	+ 3	−10	+ 2	+13	+ 7	+11	+ 8	+ 5	−19	− 6	+ 1	− 7
Oct.	+ 8	+ 4	− 1	+ 8	+ 5	−13	+ 5	+15	+ 9	+10	+ 7	− 1	−18	− 2	+ 1	− 2
Nov.	+ 9	+ 2	− 1	+ 7	− 1	−17	+ 9	+17	+11	+ 5	+ 4	− 6	−15	+ 4	+ 0	− 1
Dec.	+10	+ 1	− 2	+ 7	− 2	−18	+14	+16	+ 6	+ 6	+ 8	−11	−14	+ 4	− 2	+ 4

* Denotes months in which composition of curve changes.

INDEX NUMBERS OF BUSINESS COMPILED BY U. S. DEPARTMENT OF COMMERCE.—A number of useful index numbers appear monthly in the "Survey of Current Business" compiled by the U. S. Department of Commerce. These cover the fields of production, building construction, wholesale and retail trade, stocks, unfilled orders, and prices.

BUSINESS FORECASTING; PRIVATE AGENCIES.—The business man who is concerned with the analysis of current business conditions and with the forecasting of business changes need not confine himself to an individual study of the available records of business. A number of private agencies have been developed for the purpose of selling to the business world such analyses and forecasts of business prospects. Studies and forecasts of the same nature are contained in various financial and trade publications. The work of such agencies varies in character and in method. No attempt can be made here to explain in detail the methods employed by the different agencies. Their general nature may be revealed, however, by a brief consideration of the methods employed by several of these organizations.

In this discussion we are concerned only with one phase of the work done by such agencies. All these agencies give advice on specific aspects of the business situation and information relating to specific commodities and trade lines. Our present concern, however, lies only in their general work connected with the analysis of the business situation and the forecasting of general business changes.

BABSON'S STATISTICAL ORGANIZATION.—The fundamental elements in Babson's forecasting work are represented in the **"compositplot"** which is published weekly. This plot is built up as follows. An index of business activity is composed of the following 12 series:

Immigration	Railroad earnings
New building	Foreign trade
Business failures	Foreign money rates
Check transactions	Domestic money rates
Commodity prices	Canadian conditions
Yield of leading crops	Stock market conditions

By methods which need not concern us here, an average of these series is obtained. The method of averaging is designed to eliminate the effects of seasonal movements. This average when plotted gives a broken line reflecting the course of business activity.

The next step is the construction of a line of growth called by Babson **the XY line.** This line is drawn through the plotted series representing the index of business activity in such a way that the areas marked out below the line will equal the areas traced out above the line. It is a fundamental thesis with Babson that in economics as in physics "action and reaction are equal." Interpreting this in an economic sense, it means that when the line representing the index of business activity traces out a certain area above the line of normal growth, there must be a swing downward, namely, a period of depression, such that an equal area will be traced out below the line. The assumption is not made that a period of depression will cover a length of time equal to the time covered by the preceding period of prosperity. The time factor must be multiplied by the intensity of a given period of prosperity or depression, the area representing the combined effect of these two factors.

In the projection of the line of normal growth into the future, use was made formerly of bank clearings outside New York, these being taken since they represented not only physical growth but changes in pecuniary values as

well. Since 1919 bank clearings have been replaced by check transactions for this purpose.

BROOKMIRE ECONOMIC SERVICE.—Chief emphasis in the work of the Brookmire Service is placed upon the construction of a curve designed to forecast **changes in stock and commodity prices.** The values upon which this curve is based are secured by averaging the following series:

Index of speculative activity (index based on stock prices and shares traded on the New York Stock Exchange).
A composite index of domestic production and marketing.
Ratio of imports to exports.
Rate of turnover of bank deposits.
Rate on 4 to 6 months' commercial paper.
The open market rate on money in London.

A correction is made for secular trend for the second series noted above. There is said to be no secular trend apparent in the case of the other series. In the interpretation of this index current figures are compared with the average during the period 1904 to 1913. The movement of the forecasting line is upward so long as the index is above the average for the 1904 to 1913 base period. The actual value of the forecasting curve at any one time is determined by cumulating the values of the index proper, so long as these values remain above the 1904–1913 base. A neutral zone has been established by the compilers of this index, and significance is attached to the movements of the forecasting curve only when it gets beyond this neutral zone, which extends above and below the base line a distance equal to about 3% of the total range of fluctuations.

It is held that movements of the forecasting curve anticipate stock price changes by one month, and anticipate commodity price changes by 6 or 7 months. No attempt is made to forecast the extent of a movement, sole emphasis being placed upon the problem of determining when a change in direction will take place.

This series in its present form has been published for only about 3 years. An earlier method employed by the Brookmire Economic Service was discontinued as a result of the extreme price movements during the war period.

HARVARD ECONOMIC SERVICE.—The most ambitious attempt to construct a forecasting index based upon a scientific study of the sequences prevailing during the business cycle is that which is represented in the work of the Harvard Committee on Economic Research, conducted under the direction of Prof. W. M. Persons. Various studies were made by Persons with the prime aim of determining the precise order in which the most important business series moved during the business cycle. His first studies were based upon an analysis of annual data during the period from 1879 to 1913. These studies were later refined and carried out in greater detail, monthly data over a somewhat shorter period being employed.

The process involved, first, the correction of all the individual series for secular trend and seasonal variation. The resulting figures, representing the cyclical movements in the individual series, were plotted and the graphs compared in order to determine roughly whether there was any consistent time relationship between the cyclical movements of the different series. In this rough way it was determined that the different series studied could be divided into fairly definite classes, series being grouped together if their movements during the business cycle were synchronous.

This rough grouping was next tested and verified by the use of the co-

efficient of correlation, a statistical device used to determine the degree of relationship between variable quantities. By means of this index it was possible to determine whether, for example, Bradstreet's index of prices and the discount rate on 60–90 day paper moved concurrently in their cyclical fluctuations, or whether there was a lagging of one series after the other. The coefficient of correlation afforded a means of measuring quite accurately the time relationship between the cyclical fluctuations in these different series.

By this means Persons ascertained that the cyclical fluctuations in the prices of industrial stocks preceded fluctuations in commodity prices on the average by 10 months. He determined also that cyclical fluctuations in the rate on 4 to 6 months' paper lagged behind cyclical fluctuations in commodity prices by 4 months on the average. The relations between movements in other series and commodity prices were similarly measured. In his final grouping of the series he had studied he formed 3 classes. These were:

1. Series reflecting speculative activity.
2. Series reflecting business activity.
3. Series reflecting banking conditions.

Persons found that, on the average, series falling in the first group preceded in their cyclical changes the series falling in the second group by 4 to 10 months, and that series falling in the second group preceded series falling in the third group by 2 to 8 months. Accordingly, 3 different index numbers were constructed, the forecasts of impending changes being based upon the relation between these 3 index numbers representing, respectively, speculative, business and banking conditions.

These index numbers as at present constituted are constructed as follows:

1. The index of speculative activity is based on New York bank debits and industrial stock prices.
2. The index of business activity is based on outside bank debits and commodity prices at wholesale.
3. The index of money conditions is based on commercial paper rates.

The movements in these different index numbers for the period since the Armistice are shown in Fig. 4, which is here reproduced by courtesy of the Harvard Economic Service.

In the interpretation of such a chart as this, the method of constructing the index numbers depicted, and the nature of the constituent series, must be borne in mind. The index of business conditions, represented by the heavy black line in Fig. 4, fluctuated, during the first 6 months of 1924, within rather narrow limits above and below the line representing a normal state of affairs. Yet during this period practically every American industry was experiencing a pronounced recession. For 4 successive months (March to June 1924) the volume of production declined, the loss being particularly severe in the textile and iron and steel trades. The explanation of the failure of curve "B" of the Harvard chart to reflect this recession is found in the constitution of the business index. The movements of the two series employed in the compilation of this index—bank debits outside New York and an index of commodity prices at wholesale—were not thoroughly representative of the state of general business during this period. The composite index of business activity constructed by the Statistical Division of the American Telephone & Telegraph Co., being based upon a wider and more representative list of statistical series, reflects the drop in the spring of 1924 much more faithfully.

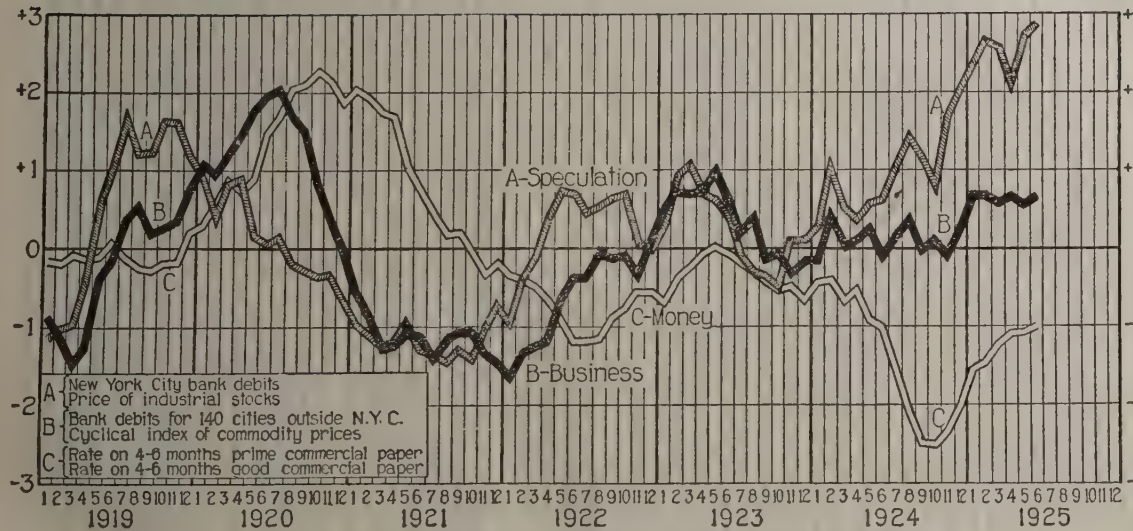

FIG. 4. Index Chart of Business Conditions—Harvard Economic Service

The Control of the Individual Business Enterprise During the Business Cycle

EFFECT OF CYCLICAL CHANGES IN INDUSTRIAL BUSINESS.— In the preceding discussion we have been concerned primarily with the business cycle as it affects the business world in general, and with methods of forecasting business events with reference only to general developments. We may now take up the more practical problem concerned with the individual business unit, as its activities are affected by cyclical changes in business conditions.

Certain of the effects of the cycle on individual concerns are favorable. During revival and prosperity demand is increasing, selling prices are rising more rapidly than costs, and profits are being augmented. During these phases of the cycle individual manufacturers and merchants are feeling in general nothing but good effects from the cyclical swings of business. Since our major concern, however, is that of alleviating the bad effects of cycles, we may outline in more detail the disabilities which affect individual units as a result of cyclical fluctuations.

Even during revival and the beginning of prosperity, certain of these ill effects are beginning to appear. The increase in raw material prices, in labor costs and rents, and the higher rates charged for credit accommodations are increasing the costs of carrying on business. Later, when the situation becomes more difficult, the evil of cancellation develops. The business man finds that his customers are refusing to take goods which they have ordered, and that there is a falling off in the volume of orders. During the later stages of prosperity each concern is faced by much more severe competition. Prices are maintained with difficulty. Collections are slow, while at the same time banks and mercantile creditors are pressing for the payment of debts. The decline in prices, which is characteristic of the period of crisis, usually finds merchants and manufacturers with large inventories which depreciate materially in value at this time. These excessive inventories are usually made up of finished goods rather than raw materials.

During the period of liquidation the individual business man usually suffers through being forced to dispose of his goods at a loss in order to meet his obligations. There may result then either bankruptcy, shutting down, or operation at reduced rate, all involving at least a sacrifice of profits, and possibly necessitating the carrying on of business at an actual loss. During depression these difficulties are likely to continue. One of the most important reasons for financial loss during such a period is found in the **continuation of fixed charges** of all sorts. It is possible during depression for the individual concern to reduce its direct costs by the discharge of labor and the reduction of purchases of raw materials, but most of the elements of overhead cost cannot be so reduced. In this fact, coupled with the necessity of operating below capacity, is found one of the most important sources of economic loss during depression.

These, then, are some of the ways in which the average business unit is made to feel the ill effects of the business cycle. Since the cycle in its major movements lies quite beyond the control of the individual business man, the latter, in seeking to avoid these evil effects, is forced to do so primarily by adapting his operating program to changes in external conditions. With an increasing knowledge of the business cycle on the part of business men in general, this process of adaptation is being more widely followed, though it is by no means characteristic of general business practice.

PREVENTIVE AND RELIEF MEASURES FOR PERIODIC FLUCTUATIONS.—Devices which have been employed to avoid the evil effects of **seasonal fluctuations,** to secure continuity of production during the year, may be first noted. Certain of these have been outlined by M. I. Stone, General Manager of the Hickey-Freeman Company ("Business Cycles and Unemployment," National Bureau of Economic Research).

1. Spreading the delivery of orders over a large part of the season. This method has been employed by clothing houses and by manufacturers of "holiday goods." Retailers have been persuaded in many cases to accept deliveries in advance through the offer of special discounts or through deferred dating.
2. Inducing retailers to place orders well in advance of delivery.
3. The development of staple products on which the plant can be kept busy between seasons.
4. Manufacturing to stock. This device has been employed rather widely. It is clear, of course, that it may involve the tying up of financial resources in a large inventory. It appears to be particularly suitable to industries in which the staple products combine a high labor and a low material value.
5. The transfer of surplus help from one operation to another or from one department to another. It is essential to the employment of this method that members of the working force be trained to perform more than one operation.
6. The reduction in selling prices during the off season. This practice has been consistently followed in the distribution of anthracite coal.

MINIMIZING EFFECTS OF BUSINESS CYCLE.—Many of the devices described above are applicable with or without modification to the similar problem which is connected with **cyclical fluctuations.** The methods that have been employed by business men to enable the ill effects of the cycle to be avoided or minimized are of **two general types.** These are:

1. Those methods based on prevention and foresight, which are designed to prevent the individual concern from suffering severely during crisis and liquidation.
2. Those methods of relief which are designed to assist in the recovery following upon a period of liquidation.

The former class includes all measures which would be adopted during the period of prosperity for the purpose of regulating purchases, safeguarding assets, and avoiding unwise credit extension. The second class includes the measures which might be adopted during depression in order to stimulate sales and to stabilize production.

The application of measures of the first class is only possible when there exists on the part of the managers of the enterprise in question a knowledge of the economic characteristics of the business cycle and of the usual sequence of events during the business cycle, a knowledge of the practical world of business which enables an intelligent judgment to be made at any time as to the phase of the cycle through which business is then passing, and a knowledge of the behavior of that particular business enterprise during the business cycle. It is essential, therefore, that studies shall have previously been made having as objects the determination of the precise relation between cyclical changes in general business and cyclical changes in the business of the given enterprise. In particular, cyclical movements in production and sales, and in the prices of commodities purchased and sold, should be studied in their relation to the

general business cycle. Securing this knowledge constitutes a first step in any intelligent program designed to adapt business polices to external business changes. It is essential, finally, that the operations of the business enterprise be conducted on the budget basis.[3] Without the planning and co-ordination which the formation of a budget calls for, no comprehensive program of cyclical control can be adopted.

PREVENTIVE MEASURES.—Certain of the measures which may be employed in forestalling and preventing the ill effects of liquidation may be enumerated:

1. The collection and interpretation of internal statistics. The current compilation of statistics on the following subjects is necessary to an intelligent co-ordination of the activities of the individual enterprise with the movements in general business:
   (a) Production
   (b) Sales
   (c) Purchases
   (d) Raw material costs
   (e) Selling prices
   (f) Stock of raw materials
   (g) Stock of finished goods on hand
   (h) Shipments
   (i) Unfilled orders
   (j) Collections

   These statistics, with others pertinent to the operations of the given concern, should be assembled periodically (daily, weekly, or monthly), and perhaps presented in graphic form to executive officers and boards of directors. The collection and charting of statistics relating to general business conditions may be carried on in conjunction with this work.
2. The conservation of assests during prosperity, avoiding undue increase in plant and equipment, and in dividends.
3. Management of plant in such a way as to:
   (a) Avoid decrease in unit production.
   (b) Avoid increase in unit overhead.
   (c) Maintain satisfactory labor conditions and steady employment throughout the year.
4. Avoidance of excess of inventories of raw materials, material in process, and finished stock.
5. Avoidance of purchase commitments in excess of financial resources and of reasonably quick use.
6. Avoidance of excessive sales which result in cancellations.[4]
7. Employment of a somewhat flexible credit standard, which may be tightened during prosperity and relaxed during depression.

REGULATION OF INVENTORIES IN DIFFERENT PERIODS OF CYCLE.—Something more in detail may be said concerning the regulation of inventories noted in item (4) above. In the crisis of 1920 the loss through shrinkage of inventories was pronounced in practically every industrial line, and few business concerns escaped without suffering. If purchases are regulated on the

[3] For description of budget basis see Section 4 on Budgets.

[4] Items 2 to 6 above are those enumerated by Sanford E. Thompson in "Business Cycles and Unemployment."

basis of a study of cyclical movements, such loss through inventory shrinkage may be largely avoided. A **practical method** of doing this has been employed by Henry S. Dennison of the Dennison Mfg. Co.[5] This company has determined roughly the **maximum and minimum inventories** of each important raw material to be carried in different periods of the cycle. These estimates of maximum and minimum inventories are employed in conjunction with price figures for the various raw materials. The method is illustrated in Fig. 5, published by courtesy of the American Statistical Association. In this chart the price of jute from 1905 to 1921 is plotted. A line of trend has been drawn

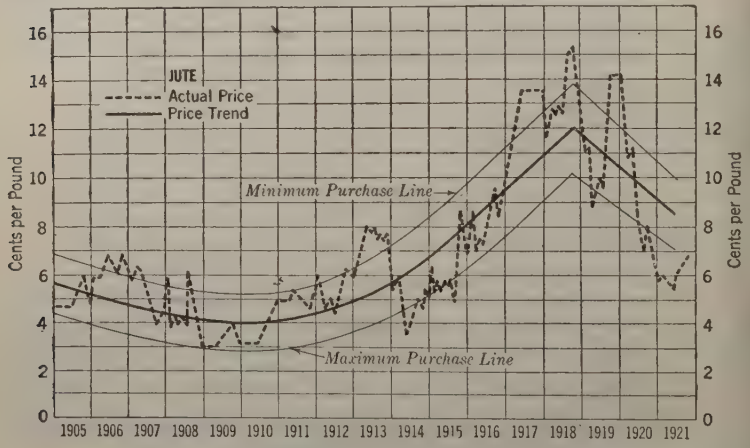

FIG. 5. The Price Trend as a Guide to Purchasing

Reproduced from an article by Henry S. Dennison, by permission of the American Statistical Association.

through the graph of the actual prices. Above and below this line of trend and parallel to it are drawn what are termed minimum and maximum purchase lines. The minimum purchase line represents the smallest amount which the company would carry for current needs, while the maximum purchase line represents the largest inventory that would be carried. Thus, on a certain raw material the standard inventory might be 6 weeks' supply, the minimum inventory 2 weeks' supply, and the maximum inventory 12 weeks' supply. Actual purchases are varied, according to the position of actual prices relative to the 3 lines representing price trend and minimum and maximum purchases. When prices are below the line of secular trend, an amount equal to the maximum inventory may be purchased; when prices are above the line of secular trend, the actual purchase may fall until only a minimum inventory is on hand.

Mr. Dennison has also called attention to the importance of what he terms **impending inventories.** That is, the merchant should take account of merchandise on order and en route, as well as goods on hand, in the formulation of his policies.

[5] Cf. *Journal of the American Statistical Association*, March 1922, pp. 23–26.

CREDIT POLICY IN DIFFERENT PERIODS OF CYCLE.—The Dennison Mfg. Co. has employed other devices for the prevention of cyclical losses, notably in the conduct of its credit department. During prosperity **credit standards** are stiffened, and its accounts strengthened. During this time, when orders are numerous, new orders are seldom accepted from customers having poor records. As a corollary of this policy, the Dennison Co. extends credit with a fair degree of freedom during depression. That is, although risks are scrutinized carefully, somewhat bigger chances are taken than during prosperity, for the reason that the orders are needed more keenly at such a time. That this policy has been a fruitful one is apparent from the records of the Dennison Co. During the depression of 1914–1915, the ratio of losses to sales was 0.0052. During the more severe period of depression in 1921, following the preparation of the credit department according to the policies described above, the loss ratio was only 0.0013.

RELIEF MEASURES.—Of measures which have been employed to mitigate the effects of depression, the following are noted by Sanford E. Thompson ("Business Cycles and Unemployment"):

1. Quick liquidation of inventories and adjustment of prices to replacement values.
2. Reduction of costs of manufacture, both direct and indirect.
3. Improvement of quality to enhance demand.
4. Adoption of selling methods based on accurate analysis of the new situation.
5. Development of plant and organization for future business.
6. Part-time operation.
7. Utilization of profits gained in good times for payments to out-of-work employees.

There may be added to this list of remedial measures, certain which have been resorted to by the Dennison Mfg. Co. This company has found it profitable to launch new merchandise lines during slack periods when the work is needed. Plans for these new lines are perfected before the depression arrives, so that the plant is ready to begin production at once when the occasion calls for it. Such a policy is particularly appropriate for a concern manufacturing novelties, as is the Dennison Co., though perhaps not widely applicable in this direct form. Modifications of this plan, involving the pushing of new lines during depression, have been employed advantageously in many fields.

The transference of employees from one department to another during depression has been mentioned above. If such a versatile labor force has been secured, some of the worst effects of depression on the personnel of a manufacturing plant can be avoided by transferring workers from manufacturing to construction departments during depression. Such a move not only benefits the plant in question but hastens recovery in the business system at large through the maintenance of purchasing power among the working population.

A PROGRAM FOR FIXED INVESTMENTS.—Another phase of the work of the Dennison Co. in attempting to control the cyclical movements of their business is that which relates to the fixed investments. In planning a **building program,** it has been found advisable to determine the long-term trend of the given business, just as the rate of normal growth may be determined for any economic series. Over-expansion of equipment may thus be avoided. Moreover, if future needs are thus estimated in advance, the building program may be so conducted that extensions are made and new plants erected at those periods

of the cycle when costs are lowest. Some such policy is applicable in the conduct of practically every business enterprise, particularly in cases in which records extending over a number of years in the past are available. Such records enable the rate of normal growth to be fairly accurately determined, and thus enable future extensions to be planned in advance.

RETAIL MERCHANTS AND THE BUSINESS CYCLE.—Most of the methods outlined above apply particularly to the manufacturer. Certain of these are applicable to the retailer, in facing liquidation and depression, but the problems of the retailer at such times are many of them peculiar to merchandising operations. During prosperity, booming trade and rising prices bring large profits to merchants generally. Competition among dealers for supplies leads usually to the accumulation of excessive inventories during this period. Then when the decline in trade and the break in prices come, merchants find themselves stocked with high cost goods which must be sold at a sacrifice. The **chief losses of retailers** during liquidation are due to the declining values of inventories rather than to a reduction in volume of sales. This important fact was abundantly demonstrated during the crisis of 1920.

In his study of merchandising, as it was affected by the business cycle, Sanford E. Thompson named, among other conclusions, **4 important lessons** which the crisis of 1920 had taught ("Business Cycles and Unemployment"):

1. That there is a lack of effective contact and teamwork between the manufacturer, the wholesaler or jobber, and the retailer.
2. That there is a lack of appreciation of the value of external statistics in forecasting changes in conditions.
3. That there is a need of comprehensive information regarding the statistical position of all important commodities.
4. That there is a need for greater development of methods of laying out buying schedules and of co-ordinating the three main functions of merchandising, i.e., management, buying and selling.

These conclusions indicate the direction in which improvement is to be made in minimizing the evil effects of the cycle upon the business of the retail merchant. Close contact and frank relations between manufacturer, jobber and retailer, co-ordination of buying and selling programs, statistical study of general business conditions and intensive statistical study of important commodities—these are essential to successful retailing in the modern business world.

RETAILER'S SPECIFIC REMEDIES.—The following specific methods of meeting the problems brought by liquidation and depression may be enumerated, in addition to the more general remedies suggested above:

1. Securing a frequent stock turnover. This is perhaps the most important single method of avoiding the ill effects of depression. The merchant whose turnover is rapid does not face the heavy loss due to shrinkage in inventory values and consequent heavy mark-downs which are the usual accompaniment of liquidation.
2. Prevention of over-buying and accumulation of excessive inventories by itemized departmental budgets and carefully drawn minimum and maximum stock limits.
3. Attention to all possible managerial economies during depression.
4. Prompt price reduction during depression in order to secure quick liquidation.
5. Maintenance of volume of sales through advertising, special features and special sales.

NECESSITY OF LONG RANGE PLANNING.—It is obviously impossible o lay down a complete set of rules for the management of any specific business luring the periods of liquidation and depression. The attempt has been made bove to present merely a summary of certain practices which have been ound helpful by some business men. In the control of a specific enterprise ccount must be taken of the particular characteristics of that business in aming a program for such occasions. The point of major importance which s emphasized by a study of business experience is that such a program must e **a comprehensive long-range plan,** a program covering all the phases of he business cycle, not a hasty improvisation drawn up only when the crisis is at hand.

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SECTION 2

MATHEMATICS OF FINANCE

Interest

DEFINITION.—Interest is the consideration paid for the use of money for a period of time. The **factors involved** in computing interest are (1) **principal,** (2) **rate,** (3) **time.**

Principal.—The principal is the sum of money upon which the interest is paid. This sum may be the amount of money invested in a business, loaned or borrowed.

Rate.—The rate is a fraction, usually expressed on a percentage basis, and is the ratio of the interest earned to the principal in the unit of time.

Time.—The **unit of time** usually used in the computation of interest is one year although any other unit, such as a month, or a day, may be used.

SIMPLE INTEREST.—When the interest is directly proportional to the time we have simple interest. This is always computed on the original principal.

COMPOUND INTEREST.—When the principal is increased by the interest, thus arriving at a new principal periodically, the interest upon this augmented principal becomes compound interest.

COMPUTING THE NUMBER OF DAYS BETWEEN DATES.—In computing days between two dates either the first day is included and the last day excluded or the first day is excluded and the last day included. Business and commercial houses as a rule count only the first or last day, but not both.

Example.—To find the number of days between July 12 and October 23. Excluding July 12, there are in

July	19 days
August	31 days
September	30 days
October	23 days
Total	103 days

Brokers and bankers frequently charge interest by counting both the first and last days when the interest is payable to themselves. In the illustration above there would thus be 104 days between July 12 and October 23.

When banks pay interest a widely different rule is applied in all instances benefiting the bank and not the customer. As these rules vary so much, it is best to obtain the information from one's own bank.

The stock-broker, by rendering accounts monthly and calculating interest for the same period, compounds the interest monthly.

To simplify the labor of determining the number of days between any two dates, Table 1 gives the number of days from January 1 to any other day of the year. Taking the problem just stated and solving it by means of the table,

from January 1 to July 12 there are 193 days, and from January 1 to October 23 there are 296 days, or a difference of 103 days. If it is a leap year, there would be 194 days and 297 respectively, or still 103 days.

Table 1. The Number of Each Day of the Year Counting from January 1

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	362
29	29		88	119	149	180	210	241	272	302	333	363
30	30		89	120	150	181	211	242	273	303	334	364
31	31		90		151		212	243		304		365

NOTE.—For leap years the number of the day is one greater than the tabular number after February 28.

EXACT INTEREST.—Exact interest is simple interest computed on the basis of 365 days to the year. **Ordinary interest** is simple interest computed on the basis of 360 days to the year.

Computation by Formula.—When interest tables are not available, exact interest may be obtained by substituting in the formula, **principal** × **rate** × **time,** the rate per annum in hundredths and the time in years or multiples of a year.

Example: To find the interest on \$10,428.40 for 193 days at 4½%.

Solution: $\$10{,}428.40 \times \frac{9}{200} \times \frac{193}{365} = \$248.14$

Computation by Use of Interest Tables.—By using the 5% exact interest table (Table 3) we find that the exact interest on \$8,426.10 for 223 days is \$257.40.

Table 2. 4% Interest Table

EXACT INTEREST ON 365-DAY BASIS AT 4%, BY DAYS FROM 1 TO 360 DAYS

Da.	$1,000	$2,000	$3,000	$4,000	$5,000	$6,000	$7,000	$8,000	$9,000
1	.1096	.2192	.3288	.4384	.5479	.6575	.7671	.8767	.9863
2	.2192	.4384	.6575	.8767	1.0959	1.3151	1.5342	1.7534	1.9726
3	.3288	.6575	.9863	1.3151	1.6438	1.9726	2.3014	2.6301	2.9589
4	.4384	.8767	1.3151	1.7534	2.1918	2.6301	3.0685	3.5068	3.9452
5	.5479	1.0959	1.6438	2.1918	2.7397	3.2877	3.8356	4.3836	4.9315
6	.6575	1.3151	1.9726	2.6301	3.2877	3.9452	4.6027	5.2603	5.9178
7	.7671	1.5342	2.3014	3.0685	3.8356	4.6027	5.3699	6.1370	6.9041
8	.8767	1.7534	2.6301	3.5068	4.3836	5.2603	6.1370	7.0137	7.8904
9	.9863	1.9726	2.9589	3.9452	4.9315	5.9178	6.9041	7.8904	8.8767
10	1.0959	2.1918	3.2877	4.3836	5.4795	6.5753	7.6712	8.7671	9.8630
20	2 1918	4.3836	6.5753	8.7671	10.9589	13.1507	15.3425	17.5342	19.7260
30	3 2877	6 5753	9.8630	13.1507	16.4384	19 7260	23.0137	26.3014	29.5890
40	4.3836	8.7671	13.1507	17.5342	21.9178	26.3014	30.6849	35.0685	39.4521
50	5.4795	10.9589	16.4384	21.9178	27.3973	32.8767	38.3562	43.8356	49.3151
60	6 5753	13.1507	19.7260	26.3014	32.8767	39.4521	46.0274	52.6027	59.1781
70	7 6712	15.3425	23.0137	30.6849	38.3562	46 0274	53.6986	61.3699	69.0411
80	8 7671	17.5342	26.3014	35.0685	43.8356	52.6027	61.3699	70.1370	78.9041
90	9.8630	19.7260	29.5890	39.4521	49.3151	59.1781	69.0411	78.9041	88.7671
100	10.9589	21.9178	32.8767	43.8356	54 7945	65.7534	76.7123	87.6712	98.6301
110	12.0548	24.1096	36.1644	48.2192	60.2740	72.3288	84.3836	96.4384	108.4932
120	13.1507	26.3014	39.4521	52 6027	65.7534	78.9041	92.0548	105.2055	118.3562
130	14 2466	28.4932	42.7397	56.9863	71.2329	85.4795	99.7260	113 9726	128.2192
140	15.3425	30.6849	46.0274	61.3699	76.7123	92 0548	107.3973	122.7397	138.0822
150	16.4384	32.8767	49.3151	65.7534	82.1918	98.6301	115.0685	131.5068	147.9452
160	17.5342	35.0685	52.6027	70.1370	87.6712	105 2055	122.7397	140.2740	157.8082
170	18.6301	37.2603	55.8904	74.5205	93.1507	111.7808	130.4110	149.0411	167.6712
180	19.7260	39.4521	59.1781	78.9041	98.6301	118.3562	138.0822	157.8082	177.5342
190	20.8219	41.6438	62.4658	83.2877	104.1096	124.9315	145.7534	166.5753	187.3973
200	21.9178	43.8356	65.7534	87.6712	109.5890	131.5068	153.4247	175.3425	197.2603
210	23.0137	46.0274	69.0411	92.0548	115.0685	138.0822	161.0959	184.1096	207.1233
220	24.1096	48.2192	72.3288	96.4384	120.5479	144.6575	168.7671	192.8767	216.9863
230	25.2055	50.4110	75.6164	100.8219	126.0274	151.2329	176.4384	201.6438	226.8493
240	26.3014	52.6027	78.9041	105.2055	131.5068	157.8082	184.1096	210 4110	236.7123
250	27.3973	54.7945	82.1918	109.5890	136.9863	164.3836	191.7808	219.1781	246.5753
260	28.4932	56.9863	85.4795	113.9726	142.4658	170.9589	199.4521	227.9452	256.4384
270	29.5890	59.1781	88.7671	118.3562	147.9452	177.5342	207.1233	236.7123	266.3014
280	30.6849	61.3699	92.0548	122.7397	153.4247	184.1096	214.7945	245.4795	276.1644
290	31.7808	63.5616	95.3425	127.1233	158.9041	190.6849	222.4658	254.2466	286.0274
300	32.8767	65.7534	98.6301	131.5068	164.3836	197.2603	230.1370	263.0137	295.8904
310	33.9726	67.9452	101.9178	135.8904	169.8630	203.8356	237.8082	271.7808	305.7534
320	35.0685	70.1370	105.2055	140.2740	175.3425	210.4110	245.4795	280.5479	315.6164
330	36.1644	72.3288	108.4932	144.6575	180.8219	216.9863	253.1507	289.3151	325.4795
340	37.2603	74.5205	111.7808	149.0411	186.3014	223.5616	260.8219	298.0822	335.3425
350	38.3562	76.7123	115.0685	153.4247	191.7808	230.1370	268.4932	306.8493	345.2055
360	39.4521	78.9041	118.3562	157.8082	197.2603	236.7123	276.1644	315.6164	355.0685

Table 3. 5% Interest Table

EXACT INTEREST ON 365-DAY BASIS AT 5%, BY DAYS FROM 1 TO 360 DAYS

Da.	$1,000	$2,000	$3,000	$4,000	$5,000	$6,000	$7,000	$8,000	$9,000
1	.1370	.2740	.4110	.5749	.6849	.8219	.9589	1.0959	1.2329
2	.2740	.5479	.8219	1.0959	1.3699	1.6438	1.9178	2.1918	2.4658
3	.4110	.8219	1.2329	1.6438	2.0548	2.4657	2.8767	3.2877	3.6986
4	.5479	1.0959	1.6438	2.1918	2.7397	3.2877	3.8356	4.3836	4.9315
5	.6849	1.3699	2.0548	2.7397	3.4247	4.1096	4.7945	5.4795	6.1644
6	.8219	1.6438	2.4658	3.2877	4.1096	4.9315	5.7534	6.5753	7.3973
7	.9589	1.9178	2.8767	3.8356	4.7945	5.7534	6.7123	7.6712	8.6301
8	1.0959	2.1918	3.2877	4.3836	5.4795	6.5753	7.6712	8.7671	9.8630
9	1.2329	2.4658	3.6986	4.9315	6.1644	7.3973	8.6301	9.8630	11.0959
10	1.3699	2.7397	4.1096	5.4795	6.8493	8.2192	9.5890	10.9589	12.3288
20	2.7397	5.4795	8.2192	10.9589	13.6986	16.4384	19.1781	21.9178	24.6575
30	4.1096	8.2192	12.3288	16.4384	20.5479	24.6575	28.7671	32.8767	36.9863
40	5.4795	10.9589	16.4384	21.9178	27.3973	32.8767	38.3562	43.8356	49.3151
50	6.8493	13.6986	20.5479	27.3973	34.2466	41.0959	47.9452	54.7945	61.6438
60	8.2192	16.4384	24.6575	32.8767	41.0959	49.3151	57.5342	65.7534	73.9726
70	9.5890	19.1781	28.7671	38.3562	47.9452	57.5342	67.1233	76.7123	86.3014
80	10.9589	21.9178	32.8767	43.8356	54.7945	65.7334	76.7123	87.6712	98.6301
90	12.3288	24.6575	36.9863	49.3151	61.6438	73.9726	86.3014	98.6301	110.9589
100	13.6986	27.3973	41.0959	54.7945	68.4931	82.1918	95.8904	109.5890	123.2877
110	15.0685	30.1370	45.2055	60.2740	75.3425	90.4110	105.4795	120.5479	135.6164
120	16.4384	32.8767	49.3151	65.7534	82.1918	98.6301	115.0685	131.5068	147.9452
130	17.8082	35.6164	53.4247	71.2329	89.0411	106.8493	124.6575	142.4658	160.2740
140	19.1781	38.3562	57.5342	76.7123	95.8904	115.0685	134.2466	153.4247	172.6027
150	20.5479	41.0959	61.6438	82.1918	102.7397	123.2877	143.8356	164.3836	184.9315
160	21.9178	43.8356	65.7534	87.6712	109.5890	131.5068	153.4247	175.3425	197.2603
170	23.2877	46.5753	69.8630	93.1507	116.4384	139.7260	163.0137	186.3014	209.5890
180	24.6575	49.3151	73.9726	98.6301	123.2877	147.9452	172.6027	197.2603	221.9178
190	26.0274	52.0548	78.0822	104.1096	130.1370	156.1644	182.1918	208.2192	234.2466
200	27.3973	54.7945	82.1918	109.5890	136.9863	164.3836	191.7808	219.1781	246.5753
210	28.7671	57.5342	86.3014	115.0685	143.8356	172.6027	201.3699	230.1370	258.9041
220	30.1370	60.2740	90.4110	120.5479	150.6849	180.8219	210.9589	241.0959	271.2329
230	31.5068	63.0137	94.5205	126.0274	157.5342	189.0411	220.5479	252.0548	283.5616
240	32.8767	65.7534	98.6301	131.5068	164.3836	197.2603	230.1370	263.0137	295.8904
250	34.2466	68.4932	102.7397	136.9863	171.2329	205.4795	239.7260	273.9726	308.2192
260	35.6164	71.2329	106.8493	142.4658	178.0822	213.6986	249.3151	284.9315	320.5479
270	36.9863	73.9726	110.9589	147.9452	184.9315	221.9178	258.9041	295.8904	332.8767
280	38.3562	76.7123	115.0685	153.4247	191.7808	230.1370	268.4932	306.8493	345.2055
290	39.7260	79.4521	119.1781	158.9041	198.6301	238.3562	278.0822	317.8082	357.5342
300	41.0959	82.1918	123.2877	164.3836	205.4795	246.5753	287.6712	328.7671	369.8630
310	42.4658	84.9315	127.3973	169.8630	212.3288	254.7945	297.2603	339.7260	382.1918
320	43.8356	87.6712	131.5068	175.3425	219.1781	263.0137	306.8493	350.6849	394.5205
330	45.2055	90.4110	135.6164	180.8219	226.0274	271.2329	316.4384	361.6438	406.8493
340	46.5753	93.1507	139.7260	186.3014	232.8767	279.4521	326.0274	372.6027	419.1781
350	47.9452	95.8904	143.8356	191.7808	239.7260	287.6712	335.6164	383.5616	431.5068
360	49.3151	98.6301	147.9452	197.2603	246.5753	295.8904	345.2055	394.5205	443.8356

Table 4. 6% Interest Table

EXACT INTEREST ON 365-DAY BASIS AT 6%, BY DAYS FROM 1 TO 360 DAYS

Da.	$1,000	$2,000	$3,000	$4,000	$5,000	$6,000	$7,000	$8,000	$9,000
1	.1644	.3288	.4932	.6575	.8219	.9863	1.1507	1.3151	1.4795
2	.3288	.6575	.9863	1.3151	1.6438	1.9726	2.3014	2.6301	2.9589
3	.4932	.9863	1.4795	1.9726	2.4658	2.9589	3.4521	3.9452	4.4384
4	.6575	1.3151	1.9726	2.6301	3.2877	3.9452	4.6027	5.2603	5.9178
5	.8219	1.6438	2.4658	3.2877	4.1096	4.9315	5.7534	6.5753	7.3973
6	.9863	1.9726	2.9589	3.9452	4.9315	5.9178	6.9041	7.8904	8.8767
7	1.1507	2.3014	3.4521	4.6027	5.7534	6.9041	8.0548	9.2055	10.3562
8	1.3151	2.6301	3.9452	5.2603	6.5753	7.8904	9.2055	10.5205	11.8356
9	1.4795	2.9589	4.4384	5.9178	7.3973	8.8767	10.3562	11.8356	13.3151
10	1.6438	3.2877	4.9315	6.5753	8.2192	9.8630	11.5068	13.1507	14.7945
20	3.2877	6.5753	9.8630	13.1507	16.4384	19.7260	23.0137	26.3014	29.5890
30	4.9315	9.8630	14.7945	19.7260	24.6575	29.5890	34.5205	39.4521	44.3836
40	6.5753	13.1507	19.7260	26.3014	32.8767	39.4521	46.0274	52.6027	59.1781
50	8.2192	16.4384	24.6575	32.8767	41.0959	49.3151	57.5342	65.7534	73.9726
60	9.8630	19.7260	29.5890	39.4521	49.3151	59.1781	69.0411	78.9041	88.7671
70	11.5068	23.0137	34.5205	46.0274	57.5342	69.0411	80.5479	92.0548	103.5616
80	13.1507	26.3014	39.4521	52.6027	65.7534	78.9041	92.0548	105.2055	118.3562
90	14.7945	29.5890	44.3836	59.1781	73.9726	88.7671	103.5616	118.3562	133.1507
100	16.4384	32.8767	49.3151	65.7534	82.1918	98.6301	115.0685	131.5068	147.9452
110	18.0822	36.1644	54.2466	72.3288	90.4110	108.4932	126.5753	144.6575	162.7397
120	19.7260	39.4521	59.1781	78.9041	98.6301	118.3562	138.0822	157.8082	177.5342
130	21.3699	42.7397	64.1096	85.4795	106.8493	128.2192	149.5890	170.9589	192.3288
140	23.0137	46.0274	69.0411	92.0548	115.0685	138.0822	161.0959	184.1096	207.1233
150	24.6575	49.3151	73.9726	98.6301	123.2877	147.9452	172.6027	197.2603	221.9178
160	26.3014	52.6027	78.9041	105.2055	131.5068	157.8082	184.1096	210.4110	236.7123
170	27.9452	55.8904	83.8356	111.7808	139.7260	167.6712	195.6164	223.5616	251.5068
180	29.5890	59.1781	88.7671	118.3562	147.9452	177.5342	207.1233	236.7123	266.3014
190	31.2329	62.4658	93.6986	124.9315	156.1644	187.3973	218.6301	249.8630	281.0959
200	32.8767	65.7534	98.6301	131.5068	164.3836	197.2603	230.1370	263.0137	295.8904
210	34.5205	69.0411	103.5616	138.0822	172.6027	207.1233	241.6438	276.1644	310.6849
220	36.1644	72.3288	108.4932	144.6575	180.8219	216.9863	253.1507	289.3151	325.4795
230	37.8082	75.6164	113.4247	151.2329	189.0411	226.8493	264.6575	302.4658	340.2740
240	39.4521	78.9041	118.3562	157.8082	197.2603	236.7123	276.1644	315.6164	355.0685
250	41.0959	82.1918	123.2877	164.3836	205.4795	246.5753	287.6712	328.7671	369.8630
260	42.7397	85.4795	128.2192	170.9589	213.6986	256.4384	299.1781	341.9178	384.6575
270	44.3836	88.7671	133.1507	177.5342	221.9178	266.3014	310.6849	355.0685	399.4521
280	46.0274	92.0548	138.0822	184.1096	230.1370	276.1644	322.1918	368.2192	414.2466
290	47.6712	95.3425	143.0137	190.6849	238.3562	286.0274	333.6986	381.3699	429.0411
300	49.3151	98.6301	147.9452	197.2603	246.5753	295.8904	345.2055	394.5205	443.8356
310	50.9589	101.9178	152.8767	203.8356	254.7945	305.7534	356.7123	407.6712	458.6301
320	52.6027	105.2055	157.8082	210.4110	263.0137	315.6164	368.2192	420.8219	473.4247
330	54.2466	108.4932	162.7397	216.9863	271.2329	325.4795	379.7260	433.9726	488.2192
340	55.8904	111.7808	167.6712	223.5616	279.4521	335.3425	391.2329	447.1233	503.0137
350	57.5342	115.0685	172.6027	230.1370	287.6712	345.2055	402.7397	460.2740	517.8082
360	59.1781	118.3562	177.5342	236.7123	295.8904	355.0685	414.2466	473.4247	532.6027

SHORT-CUT COMPUTATION OF ORDINARY INTEREST AT 6%.—The rate of 6% per annum is in more common use than is any other rate. As 6 is a multiple of 12, the number of months in the year, it lends itself to certain mathematical short cuts. Also, as 30 days per month gives 360 days to the year, this is often used as a basis upon which ordinary interest computations are made. On this basis the rate per month is ½ of 1%, or 1% for 60 days. Therefore, in order to compute the interest for 60 days on any amount when the rate is 6%, it is only necessary to move the decimal point two places to the left. For example, the interest on $1,580 at 6% for 60 days is $15.80.

If the number of days is a **multiple of 6,** the solution of any interest problem under this method is simplified, as is shown by the following examples.

Example 1: Find the interest on $847.15 for 108 days at 6%:

	$8.4715	interest for		60	days
	16.9430	"	"	120	"
Less:	1.6943	"	"	12	"
	$15.2487	"	"	108	"

The interest is $15.25.

Example 2: Find the interest on $1,430.12 for 83 days at 6%:

$14.3012	interest for		60	days
4.7671	"	"	20	"
.7151	"	"	3	"
$19.7834	"	"	83	"

The interest is $19.78.

SHORT-CUT INTEREST COMPUTATION BY INTERCHANGE OF PRINCIPAL AND DAYS.—When the principal is a factor or multiple of 6, interchange principal and days. The interest on $4,800 for 27 days is the same as the interest on $27 for 4,800 days. The interest on $27 for 60 days equals $.27, secured by moving the decimal point two places to the left. Multiplying $.27 by 80 gives $21.60, the interest on $27 for 4,800 days, or its equivalent, the interest on $4,800 for 27 days.

ADJUSTING INTEREST COMPUTATION FROM 360- TO 365-DAY BASIS.—When interest has been computed on the basis of 360 days as in preceding illustrations, and it is desired to adjust it to a 365-day basis, the amount of the interest should be decreased by 1/73 of itself, because the difference of 5 days is 1/73 of 365. Thus, to find the exact interest on $942.52 for 19 days at 6%, take the amount computed on a 360-day basis, $2.98465, and from this amount deduct 1/73 of itself, which leaves $2.94377 as the interest for the given time and rate on a 365-day basis.

Explanation of reason why 1/73 is subtracted from ordinary interest:

1 day's int. on 360-day basis is 1/360 of year's int.
" " " " 365-day " " 1/365 " " "

1 day's exact int.: 1 day's ordinary int. = 1/365 : 1/360
or as 1/73: 1/72 = 1/73 × 72/1 = 72/73
or, exact int.: Ordinary int. = 72 : 73

SHORT-CUT INTEREST COMPUTATION WHEN RATE DIFFERS FROM 6%.—The following additional rules are to be applied when the rate of interest differs from 6%. Point off 2 places of decimals to the left for

72 days at 5%	90 days at 4%
80 days at 4½%	120 days at 3%

These were obtained in each instance by dividing 360 by the rate.

Example: To find the interest on $518.60 at 5% for 90 days:

	$51.86	interest for	72 days
¼ of $51.86 or	12.97	"	" 18 days
	$64.83	"	" 90 days at 5%

At 4½% the interest for 90 days would be as follows:

	$51.86	interest for	80 days
⅛ of $51.86 or	6.48	"	" 10 days
	$58.34	"	" 90 days at 4½%

ALTERNATIVE METHOD WHEN RATE DIFFERS FROM 6%.—Where the number of days upon which the interest is to be computed is not a multiple of the days shown in the above tabulation, the following rule is to be applied:

1. Secure the interest for 6 days at 6% by pointing off 3 places in the principal.
2. Multiply this result by the number of days interest is reckoned, which gives interest for six times the required number of days.
3. Divide this result by 6.

Example: To find the interest on $942.52 for 19 days at 6%:

$ .94252 interest for 6 days
19
848268
94252
$17.90788 interest for 114 days
$17.90788 ÷ 6 = $2.98465 interest for 19 days

With a rate other than 6%, find the interest at 6% as above and adjust the interest to the required basis. For example, with a rate of 5% the interest on $942.52 for 19 days is $2.48721. This would be found by taking 5/6 of the interest at 6% which was $2.98465.

With a rate of 7%, take 7/6 of the interest at 6%, which gives $3.48209.

INTEREST ON U.S. GOVERNMENT SECURITIES.—Interest on bonds or notes issued by the United States government is computed on the basis of **exact interest** for the exact number of days falling within the interest period. Thus, the number of days in the 6 months' periods ending on the 15th of March, May, July and August, during ordinary years, is 181 days, and in leap years is 182. The number of days in the 6 months' periods ending on the 15th of April and June in ordinary years is 182, in leap years is 183; for 6 months ending on the 15th of October and December in both ordinary and leap years the number of days is 183. As February does not enter into the 6 months' periods ending on the 15th of January, February, September and November, the number of days in these periods is 184, whether in ordinary or leap years.

As an example, the interest on $10,000 U. S. 4th Liberty bonds, 4¼%, payable April 15, in an ordinary year, which bonds had been held for 174 days, is $203.16. This figure is obtained as follows:

The number of days in the 6 months' period is 182, or for the 12 months' period it would be 364.

$$\$10{,}000 \times \frac{174}{364} \times \frac{17}{400} = \$203.16$$

The interest on $10,000 U. S. 3rd Liberty bonds, 4¼%, due September 15, which have been held for 174 days is $200.95. Though the principal, interest rate and time in days are the same as in the previous illustration, there is a

difference of $2.21 in interest. This is due to the fact that the number of days in the 6 months' interest period is 184, or 368 days for the 12 months' period. The computation is as follows:

$$\$10{,}000 \times \frac{174}{368} \times \frac{17}{400} = \$200.95$$

UNITED STATES TREASURY INTEREST TABLE.—The following interest table (Table 5) has been compiled to conform with rules of the Treasury Department in computing interest on securities issued by the United States. This table gives the interest for one day on a $1,000 bond at various interest rates.

Table 5. Interest for 1 day on $1,000 Bond

Rate per Annum %	Interest period ending on the 1st or 15th of— Jan., Feb., Sept., Nov., or during any half-year comprising 184 days	Oct., Dec., April,* June,* or during any half-year comprising 183 days	April, June, Mar.,* May,* July,* Aug.,* or during any half-year comprising 182 days	Mar., May, July, Aug., or during any half-year comprising 181 days
2	$.05434783	$.05464481	$.05494505	$.05524862
2 1/8	.06793478	.06830601	.06868132	.06906077
2 1/4	.07472826	.07513661	.07554945	.07596685
3	.08152174	.08196721	.08241758	.08287293
3 1/8	.09510870	.09562842	.09615385	.09668508
3 1/4	.10190217	.10245902	.10302198	.10359116
4	.10869565	.10928962	.10989011	.11049724
4 1/8	.11209239	.11270492	.11332418	.11395028
4 1/4	.11548913	.11612022	.11675824	.11740331
4 3/8	.11888587	.11953552	.12019231	.12085635
4 1/2	.12228261	.12295082	.12362637	.12430939
4 3/4	.12907609	.12978142	.13049451	.13121547
5	.13586957	.13661202	.13736264	.13812155
5 1/4	.14266304	.14344262	.14423077	.14502762
5 1/2	.14945652	.15027322	.15109890	.15193370
5 3/4	.15625000	.15710383	.15796703	.15883978
6	.16304347	.16393443	.16483516	.16574586

*Leap Year.

COMPUTATION OF INTEREST UNDER PARTIAL PAYMENT PLANS.—When a short-term indebtedness is reduced through periodical payments, the interest upon the indebtedness is computed upon either one of two bases. The basis commonly used among business men is known as the **"Merchant's Rule."** This method gives the results more quickly but not as accurately as the computation under the other, the **"United States Rule."**

The "Merchant's Rule."—In following the "Merchant's Rule" the interest is computed upon the total indebtedness from the date of inception to the date of maturity, and the interest earned from the date each partial payment is made to the date of maturity of the debt is deducted therefrom.

Example: A merchant obligates himself to liquidate a debt of $7,500 incurred January 1 and due on June 1 with interest at 6% per annum by making the following payments: $2,500 on February 1, $2,500 on March 15, $1,500 on May 1 and the balance on June 1.

Original debt		$7,500.00
Interest on $7,500 for 5 months		$ 187.50
Less:		
Interest on $2,500 for 4 months	$50.00	
Interest on 2,500 for 2½ months	31.25	
Interest on 1,500 for 1 month	7.50	88.75
Interest due June 1		98.75
Unpaid principal		1,000.00
Balance due June 1		$1,098.75

The "United States Rule."—Under the "United States Rule," so-called from its approval by the U. S. Supreme Court,[1] each instalment is first applied against the interest due at the date the partial payment is made, and the balance of the instalment is then applied to reduce the principal. Interest is always computed upon the reduced principal as in the solution below:

Original debt		$7,500.00
Payment made February 1	$2,500.00	
Interest on $7,500 for 1 month	37.50	2,462.50
		5,037.50
Payment made March 15	2,500.00	
Interest on $5,037.50 for 1½ months	37.78	2,462.22
		2,575.28
Payment made May 1	1,500.00	
Interest on $2,575.28 for 1½ months	19.31	1,480.69
		1,094.59
Interest on $1,094.59 for 1 month to June 1		5.47
Balance due June 1		$1,100.06

BANK INTEREST ON DAILY BALANCES.—Many commercial banks allow interest to depositors on the daily balances when they exceed a specified amount ranging from $200 to $1,000. The rate of interest allowed usually varies from 1 to 2%. Both minimum balances and rate of interest may be the subject of special arrangement. Many depositors accept the amount of interest credited to their accounts without attempting to verify its accuracy. Where the amount involved is small any errors in computation would entail little material loss. Where large balances are maintained, the accuracy of the interest allowed on balances by the bank is of importance.

The following is an example of the method employed by a bank which agrees to pay interest at the rate of 2% per annum on the daily balances when such balances are in excess of $1,000. This bank, for convenience, bases its computation on even hundred dollars; other banks merely eliminate cents.

Date	Deposits	Withdrawals	Balances	Days Balance is Maintained	Day Dollars
Sept. 1			$10,265.20	2	$ 20,400
3		$8,600	1,665.20	3	4,800
6	$ 1,200.00		2,865.20	2	5,600
8	22,187.60		25,052.80	4	100,000
12		20,000	5,052.80	6	30,000
18	14,375.00		19,427.80	5	97,000
23	8,642.55		28,070.35	3	84,000
26		27,600	470.35	1	–
27	10,000.00		10,470.35	3	31,200
30	5,260.00		15,730.35	–	–
					$373,000

[1] *Woodward, Baldwin & Co.* v. *Daniel A. Jewell et al.*, 140 U. S. 247.

The above shows that the depositor had balances in the bank in excess of $1,000 for every day of the month except one. The computation shows that balances carried for the month were equivalent to $373,000 for one day. The depositor is therefore entitled to one day's interest on this $373,000 at 2%. Using the daily interest rate shown below, we have .0000548 × $373,000 = $20.44, the amount of interest due this depositor.

One-day Interest Table—365 day Basis.—One day's interest at 1% per annum:

1 %	$.0000274	2½%	.0000684
1½%	.0000411	3 %	.0000822
2 %	.0000548		

Bank Discount

DEFINITION.—Bank discount is the consideration deducted by the bank from the face of the note or draft for cashing it before its date of maturity.

COMPUTATION.—The discount is computed as **simple interest** on the amount of the note or draft from the date of discount to the date of maturity and is paid in advance.

PROCEEDS OF DISCOUNTED PAPER.—The proceeds is the amount received from the bank and is the face value of the note or draft less the discount.

DAYS COMPUTED IN DISCOUNT.—Banks usually compute the term of discount in **exact days.** In Arkansas, Kentucky, Louisiana, Maryland, in the large cities of Missouri, in North Carolina, Pennsylvania, Utah and Virginia, both the date of maturity and the date of discount are included in the term of discount.

DUE DATES FALLING ON SUNDAY OR LEGAL HOLIDAYS.—In Mississippi and Texas commercial instruments falling due on Sunday or a legal holiday are payable the preceding day; in all other states they are payable on the succeeding business day.

COMPUTING THE PROCEEDS AND DISCOUNT ON DISCOUNTED PAPER.—

Example: To find the proceeds of a 4 months' note of $3,200 dated August 4, 1924, and discounted September 26, 1924, at 6% with collection charges of 1/10%:

Date of maturity	December 4, 1924	
The term of discount from September 26 to December 4 is 69 days.		
Face value of note		$3,200.00
Discount for 60 days	$32.00	
" " 9 "	4.80	
" " 69 "	36.80	
Collection charges 1/10% on $3,200	3.20	
Total charge		40.00
Proceeds		$3,160.00

COMPUTING PROCEEDS AND DISCOUNT ON INTEREST BEARING PAPER DISCOUNTED.—Notes bearing interest on their face are treated in a similar manner:

Example: A 90-day note for $2,700 dated September 5, 1924, bearing interest at 6% is discounted September 29 with interest at 6%. Collection charge 1/10%.

Date of maturity		December 4, 1924
The term of discount from September 29 to December 4 is 66 days.		
Face value of note		$2,700.00
Interest at 6% on face of note for 60 days	$27.00	
" " 6% " " " " " 30 "	13.50	
" " 6% " " " " " 90 "		40.50
Total value of note at maturity		$2,740.50
Discount for 60 days	$27.41	
" " 6 "	2.74	
" " 66 "	30.15	
Collection charges 1/10% on $2,740.50	2.74	
Total charges		32.89
Proceeds		$2,707.61

Trade Discount

PURPOSE OF TRADE DISCOUNTS.—The trade discount permits the fixing of a **basic or list price** which may remain unchanged for a long period of time. It is used by manufacturers and jobbers in businesses that deal in articles which are more or less standardized and are in continuous demand, but have fluctuating prices. Catalogs descriptive of the articles manufactured or traded in need not be reissued at each fluctuation in the market price, but a small leaflet stating the new discount rates takes care of the price adjustments caused by the market fluctuations. As the market rises, the trade discount falls, and as the market falls the trade discount rises. **Cumulative discounts** provide the necessary device for following the rise and fall of the market.

COMPUTATION OF CUMULATIVE TRADE DISCOUNTS.—An item listed at $7.20 per dozen, less 20% and 10%, means that after deducting 20% discount, the next discount of 10% is taken on the diminished amount, shown as follows:

$7.20 less 20% is $7.20 less $1.44, or $5.76
$5.76 less 10% is $5.76 less $ .58, or $5.18, which is the net price per dozen to the purchaser.

TOTAL OF CHAIN OF DISCOUNTS NOT THE SAME AS TOTAL OF DISCOUNTS.—A chain of discounts of 20% and 10% is not equivalent to a single discount of 30%. Where there are many such chain discounts to be computed, it is well to have the clerk prepare a table like Table 6, taking into consideration the usual discounts given in the particular trade.

Table 6. Table Showing Net Equivalent After Chain Discounts

	5%	10%	12½%	16⅔%	20%	25%	33⅓%
Net	.95000	.90000	.87500	.83333	.80000	.75000	.66667
2½%	.92625	.87750	.85313	.81250	.78000	.73125	.65000
5%	.90250	.85500	.83125	.79167	.76000	.72150	.63333
10%	.85500	.81000	.78750	.75000	.72000	.67500	.60000
10%, 5%	.81225	.76950	.74813	.71250	.68400	.64125	.57000
20%	.76000	.72000	.70000	.66667	.64000	.60000	.53333
20%, 5%	.72200	.68400	.66500	.63333	.60800	.57000	.50667
20%, 10%	.68400	.64800	.63000	.60000	.57600	.54000	.48000
20%, 10%, 5%	.64980	.61560	.59850	.57000	.54720	.51300	.45600
25%	.71250	.67500	.65625	.62500	.60000	.56250	.50000

USE OF TABLE SHOWING SINGLE EQUIVALENTS OF CUMULATIVE DISCOUNTS.—To find the cost of articles listed at $62 per dozen, less discounts of 10%, 10% and 5%:

The first discount of 10% is found to be the second column on the top row. Then proceed down that column to where 10% and 5% are shown. This is .76950, which is the net equivalent after discounts of 10%, 10% and 5%. Multiply $62 by .76950 = $47.71, the net price.

Anticipation

USE OF TERM.—This is a customary term used in retail business in connection with invoices for purchases which have **dating terms.** Thus, a bill of merchandise is purchased at 2%, 10 days, 90 days extra. If merchandise is received within 10 days from date of invoice, most concerns permit the purchaser to take additional discount at the rate of, say, 6% per annum for 90 days, equivalent to 1½%, in addition to 2% cash discount.

ANTICIPATION RATES ILLUSTRATED.—In computing **anticipation on invoices,** Table 7 (adapted from publications of the Controllers' Congress of National Retail Dry Goods Association) will be of assistance. The annual rates have been reduced to a daily basis.

This table is based upon 365 days to the year and covers annual anticipation rates from 1% to 10% inclusive, covering periods from 1 to 90 days. The figures shown opposite the various number of days is the per cent applicable to the respective period, based upon the annual percentage shown at the top of the column.

Invoice dated March 31 for $4,750.90, terms 2%, 10 days, 90 days extra, f.o.b. destination, paid on April 26.

Invoice	$4,750.90
Less: Freight	30.40
	4,720.50
Less: Discount 2%	94.41
	4,626.09
Less: Anticipation 6% for 73 days (1.2%, see table)	55.51
Amount of check	$4,570.58

The 1.2% anticipation shown above is taken from Table 7 against 73 days and under the 6% column.

It is the custom with some stores to compute the discount on the face of the invoice and the anticipation on the net amount after deducting the discount; then deducting the freight charges. This plan, which favors the purchaser, is illustrated below:

Using the same example as shown above, namely, invoice dated March 31 for $4,750.90, terms 2%, 10 days, 90 days extra, f.o.b. destination, paid on April 27, the computations are as follows:

Invoice	$4,750.90
Less: Discount 2%	95.02
	4,655.88
Less: Anticipation 6% for 73 days (1.2%, see table)	55.87
	4,600.01
Less: Freight	30.40
	$4,569.61

Table 7. Anticipation Rates and Percentages

PER ANNUM RATES

Days	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	.00274	.00548	.00822	.01096	.01370	.01644	.01918	.02192	.02466	.02740
2	.00548	.01096	.01644	.02192	.02740	.03288	.03836	.04384	.04932	.05479
3	.00822	.01644	.02466	.03288	.04110	.04932	.05753	.06575	.07397	.08219
4	.01096	.02192	.03288	.04384	.05479	.06575	.07671	.08767	.09863	.10959
5	.01370	.02740	.04110	.05479	.06849	.08219	.09589	.10959	.12329	.13699
6	.01644	.03288	.04932	.06575	.08219	.09863	.11507	.13151	.14795	.16438
7	.01918	.03836	.05753	.07671	.09589	.11507	.13425	.15342	.17260	.19178
8	.02192	.04384	.06575	.08767	.10959	.13151	.15342	.17534	.19726	.21918
9	.02466	.04932	.07397	.09863	.12329	.14795	.17260	.19726	.22192	.24658
10	.02740	.05479	.08219	.10959	.13699	.16438	.19178	.21918	.24658	.27397
11	.03014	.06027	.09041	.12055	.15068	.18082	.21096	.24110	.27123	.30137
12	.03288	.06575	.09863	.13151	.16438	.19726	.23014	.26301	.29589	.32877
13	.03562	.07123	.10685	.14247	.17808	.21370	.24932	.28493	.32055	.35616
14	.03836	.07671	.11507	.15342	.19178	.23014	.26849	.30685	.34521	.38356
15	.04110	.08219	.12329	.16438	.20548	.24658	.28767	.32877	.36986	.41096
16	.04384	.08767	.13151	.17534	.21918	.26301	.30685	.35068	.39452	.43836
17	.04658	.09315	.13973	.18630	.23288	.27945	.32603	.37260	.41918	.46575
18	.04932	.09863	.14795	.19726	.24658	.29589	.34521	.39452	.44384	.49315
19	.05205	.10411	.15616	.20822	.26027	.31233	.36438	.41644	.46849	.52055
20	.05479	.10959	.16438	.21918	.27397	.32877	.38356	.43836	.49315	.54795
21	.05753	.11507	.17260	.23014	.28767	.34521	.40274	.46027	.51781	.57534
22	.06027	.12055	.18082	.24110	.30137	.36164	.42192	.48219	.54247	.60274
23	.06301	.12603	.18904	.25205	.31507	.37808	.44110	.50411	.56712	.63014
24	.06575	.13151	.19726	.26301	.32877	.39452	.46027	.52603	.59178	.65753
25	.06849	.13699	.20548	.27397	.34247	.41096	.47945	.54795	.61644	.68493
26	.07123	.14247	.21370	.28493	.35616	.42740	.49863	.56986	.64110	.71233
27	.07397	.14795	.22192	.29589	.36986	.44384	.51781	.59178	.66575	.73973
28	.07671	.15342	.23014	.30685	.38356	.46027	.53699	.61370	.69041	.76712
29	.07945	.15890	.23836	.31781	.39726	.47671	.55616	.63562	.71507	.79452
30	.08219	.16438	.24658	.32877	.41096	.49315	.57534	.65753	.73973	.82192
31	.08493	.16986	.25479	.33973	.42466	.50959	.59452	.67945	.76438	.84932
32	.08767	.17534	.26301	.35068	.43836	.52603	.61370	.70137	.78904	.87671
33	.09041	.18082	.27123	.36164	.45205	.54247	.63288	.72329	.81370	.90411
34	.09315	.18630	.27945	.37260	.46575	.55890	.65205	.74521	.83836	.93151
35	.09589	.19178	.28767	.38356	.47945	.57534	.67123	.76712	.86301	.95890
36	.09863	.19726	.29589	.39452	.49315	.59178	.69041	.78904	.88767	.98630
37	.10137	.20274	.30411	.40548	.50685	.60822	.70959	.81096	.91233	1.01370
38	.10411	.20822	.31233	.41644	.52055	.62466	.72877	.83288	.93699	1.04110
39	.10685	.21370	.32055	.42740	.53425	.64110	.74795	.85479	.96164	1.06849
40	.10959	.21918	.32877	.43836	.54795	.65753	.76712	.87671	.98630	1.09589
41	.11233	.22466	.33699	.44932	.56164	.67397	.78630	.89863	1.01096	1.12329
42	.11507	.23014	.34521	.46027	.57534	.69041	.80548	.92055	1.03562	1.15068
43	.11781	.23562	.35342	.47123	.58904	.70685	.82466	.94247	1.06028	1.17808
44	.12055	.24110	.36164	.48219	.60274	.72329	.84384	.96438	1.08493	1.20548
45	.12329	.24658	.36986	.49315	.61644	.73973	.86301	.98630	1.10959	1.23288
46	.12603	.25205	.37808	.50411	.63014	.75616	.88219	1.00821	1.13424	1.26027
47	.12877	.25753	.38630	.51507	.64384	.77260	.90137	1.03013	1.15890	1.28767
48	.13151	.26301	.39452	.52603	.65753	.78904	.92055	1.05205	1.18356	1.31506
49	.13425	.26849	.40274	.53699	.67123	.80548	.93973	1.07397	1.20821	1.34246
50	.13699	.27397	.41096	.54795	.68493	.82192	.95890	1.09589	1.23287	1.36986

Table 7. Anticipation Rates and Percentages—(Continued)

PER ANNUM RATES

Days	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
51	.13973	.27945	.41918	.55890	.69863	.83836	.97808	1.11780	1.25753	1.39726
52	.14247	.28493	.42740	.56986	.71233	.85479	.99726	1.14146	1.28219	1.42465
53	.14521	.29041	.43562	.58082	.72603	.87123	1.01643	1.16164	1.30684	1.45205
54	.14795	.29589	.44384	.59178	.73973	.88767	1.03561	1.18356	1.33150	1.47945
55	.15068	.30137	.45205	.60274	.75342	.90411	1.05479	1.20547	1.35616	1.50684
56	.15342	.30685	.46027	.61370	.76712	.92055	1.07397	1.22739	1.38082	1.53424
57	.15616	.31233	.48649	.62466	.78082	.93699	1.09315	1.24931	1.40547	1.56164
58	.15890	.31781	.47671	.63562	.79452	.95342	1.11232	1.27123	1.43013	1.58904
59	.16164	.32329	.48493	.64658	.80822	.96986	1.13150	1.29315	1.45479	1.61643
60	.16438	.32877	.49315	.65753	82192	.98630	1.15068	1.31506	1.47945	1.64383
61	.16712	.33425	.50137	.66849	.83562	1.00274	1.16986	1.33698	1.50410	1.67123
62	.16986	.33973	.50959	.67945	.84932	1.01918	1.18904	1.35890	1.52876	1.69863
63	.17260	.34521	.51781	.69041	.86301	1.03562	1.20821	1.38082	1.55342	1.72602
64	.17534	.35068	.52603	.70137	.87671	1.05205	1.22739	1.40273	1.57808	1.75342
65	.17808	.35616	.53425	.71233	.89041	1.06849	1.24657	1.42465	1.60273	1.78082
66	.18082	.36164	.54247	.72329	.90411	1.08493	1.26573	1.44657	1.62739	1.80821
67	.18356	.36712	.55068	.73425	.91781	1.10137	1.28493	1.46849	1.65205	1.83561
68	.18630	.37260	.55890	.74521	.93151	1.11781	1.30410	1.49041	1.67671	1.86301
69	.18904	.37808	.56712	.75616	.94521	1.13425	1.32328	1.51231	1.70136	1.89041
70	.19178	.38356	.57534	.76712	.95890	1.15068	1.34246	1.53424	1.72602	1.91780
71	.19452	.38904	.58356	.77808	.97260	1.16712	1.36164	1.55616	1.75068	1.94520
72	.19726	.39452	.59178	.78904	.98630	1.18356	1.38082	1.57808	1.77534	1.97260
73	.20000	.40000	.60000	.80000	1.00000	1.20000	1.40000	1.60000	1.80000	2.00000
74	.20274	.40548	.60822	.81096	1.01370	1.21644	1.41917	1.62191	1.82465	2.02739
75	.20548	.41096	.61644	.82192	1.02740	1.23288	1.43835	1.64383	1.84931	2.05479
76	.20822	.41644	.62466	.83288	1.04110	1.24931	1.45753	1.66575	1.87397	2.08219
77	.21096	.42192	.63288	.84384	1.05479	1.26575	1.47671	1.68767	1.89863	2.10958
78	.21370	.42740	.64110	.85479	1.06849	1.28219	1.49589	1.70958	1.92328	2.13698
79	.21644	.43288	.64932	.86575	1.08219	1.29863	1.51506	1.73150	1.94794	2.16438
80	.21918	.43836	.65753	.87671	1.09589	1.31507	1.53424	1.75342	1.97620	2.19183
81	.22192	.44384	.66575	.88767	1.10959	1.33151	1.55342	1.77534	1.99726	2.21917
82	.22466	.44932	.67397	.89863	1.12329	1.34794	1.57260	1.79726	2.02191	2.24657
83	.22740	.45479	.68219	.90959	1.13699	1.36438	1.59178	1.81917	2.04657	2.27397
84	.23014	.46027	.69041	.92055	1.15068	1.38082	1.61095	1.84109	2.07123	2.30136
85	.23288	.46575	.69863	.93151	1.16438	1.39726	1.63013	1.86301	2.09589	2.32876
86	.23562	.47123	.70685	.94247	1.17808	1.41370	1.64931	1.88493	2.12054	2.35616
87	.23836	.47671	.71507	.95342	1.19178	1.43014	1.66849	1.90684	2.14520	2.38356
88	.24110	.48219	.72329	.96438	1.20548	1.44657	1.68767	1.92876	2.16986	2.41095
89	.24384	.48767	.73151	.97534	1.21918	1.46301	1.70684	1.95068	2.19452	2.43835
90	.24658	.49315	.73973	.98630	1.23288	1.47945	1.72602	1.97260	2.21917	2.46575

Compound Interest

INTEREST COMPOUNDED PERIODICALLY.—When interest is added to the principal at stated uniform intervals of time, thus increasing the principal at the end of each period, the interest is said to be compounded periodically. The period is usually a quarter of a year, a half year, or a year, although it may be any fractional part of a year.

The accumulated amount obtained at the close of the final period of time is called the **compound amount** and the difference between the compound amount and the original principal is the **compound interest.**

SALIENT FEATURES OF COMPOUND INTEREST.—

1. Interest is computed upon a constantly increasing investment.
2. For each period the growth in the investment is proportional to the amount of the principal invested at the beginning of that period.

Example: Find the compound amount on $1,500 for 3 years at 6% per annum, compounded semi-annually.

Investment	$1,500.00
Interest 6 months, $1,500 at 3%	45.00
Amount at end of first 6 months	1,545.00
Interest 6 months, $1,545 at 3%	46.35
Amount at end of second 6 months	1,591.35
Interest 6 months, $1,591.35 at 3%	47.74
Amount at end of third 6 months	1,639.09
Interest 6 months, $1.639.09 at 3%	49.17
Amount at end of fourth 6 months	1,688.26
Interest 6 months, $1,688.26 at 3%	50.65
Amount at end of fifth 6 months	1,738.91
Interest 6 months, $1,739.01 at 3%	52.17
Compound amount at end of 3 years	$1,791.08
Compound amount at end of 3 years	$1,791.08
Amount at beginning	1,500.00
Compound interest	$ 291.08

If the principal amount is reduced to unity, say $1, the above statement can be restated as follows:

Investment	$1.00
Interest 6 months, $1 at 3% or	.03
Amount at end of first 6 months	1.03
Interest 6 months, $1.03 at 3%	.0309
Amount at end of second 6 months	1.0609
Interest 6 months, $1.0609 at 3%	.031827
Amount at end of third 6 months	1.092727
Interest 6 months, $1.092727 at 3%	.032782
Amount at end of fourth 6 months	1.125509
Interest 6 months, $1.125509 at 3%	.033765
Amount at end of fifth 6 months	1.159274
Interest 6 months, $1.159274 at 3%	.034778
Compound amount at end of 3 years	$1.194052

It is obvious therefore that if we represent the rate of interest per period by i, the statement immediately above may be recast as follows:

Compound amount at end of first	6 months	$1.03	$= (1 + i)$
" " " " second	6 "	1.0609	$= (1 + i)^2$
" " " " third	6 "	1.092727	$= (1 + i)^3$
" " " " fourth	6 "	1.125509	$= (1 + i)^4$
" " " " fifth	6 "	1.159274	$= (1 + i)^5$
" " " " sixth	6 "	1.194052	$= (1 + i)^6$

From Table 8 on the line corresponding to the sixth period in the 3% column, we find the value 1.19405230 which is the same as that derived above except for the fact that in the latter case the last two figures were dropped.

GENERAL FORMULA FOR COMPOUND INTEREST.—To make this apply to any number of periods, the general formula for the compound amount becomes—

$a = (1 + i)^n$, where n is the number of periods and i is the interest rate per period expressed as a decimal.

This problem can, of course, be solved arithmetically; but when n is a large number recourse must be had to logarithms. However, tables giving the compound amount for any number of periods up to 100 and at different interest rates are readily obtainable. Table 8 gives the value of 1 compounded periodically from one period to 100 periods at various rates.

Present Value

DEFINITION.—The value of a sum of money due at a future time is called the **present worth** or **present value** of that sum. It is the reciprocal of the compound amount, and may also be defined as that sum of money, which, when placed at compound interest for the full number of periods involved, will amount to that given sum.

Example: $1,500 at compound interest for 6 periods at 3% per period will amount to $1,791.08. The present worth of $1,791.08 due 6 periods hence at 3% per period compounded will be $1,500.

The formula corresponding to this would be

$$P.\ V. = \frac{1}{(1 + i)^n} \text{ or } \frac{1}{a}$$

$P.\ V.$ = present value
i = simple interest in hundredths
n = the number of periods

COMPOUND DISCOUNT.—The difference between the present worth of the future sum and that future sum is called the **compound discount** and is usually designated by the letter D.

Example: Find the present worth and compound discount of $2,100 with interest at 4½% per annum, compounded semi-annually for 6 years.

The number of periods is 12 and the interest per period is 2¼%. From Table 9, line 12, column of 2¼%, the present worth of $1 is found to be .7656675. Therefore, the present value ($P.\ V.$) of $2,100 = .7656675 × 2,100 = $1,607.90, and the compound discount is $2,100—$1,607.90, or $492.10.

Table 8. Compound Amount Tables

AMOUNT OF 1. $a = (1 + i)^n$

n	½%	1%	1¼%	1½%	1¾%
1	1.005 0000	1.010 0000	1.012 5000	1.015 0000	1.017 5000
2	1.010 0250	1.020 1000	1.025 1562	1.030 2250	1.035 3062
3	1.015 0751	1.030 3010	1.037 9707	1.045 6784	1.053 4241
4	1.020 1505	1.040 6040	1.050 9453	1.061 3636	1.071 8590
5	1.025 2512	1.051 0100	1.064 0822	1.077 2840	1.090 6166
6	1.030 3775	1.061 5202	1.077 3832	1.093 4433	1.109 7024
7	1.035 5294	1.072 1354	1.090 8505	1.109 8449	1.129 1222
8	1.040 7070	1.082 8567	1.104 4861	1.126 4926	1.148 8818
9	1.045 9106	1.093 6853	1.118 2922	1.143 3900	1.168 9872
10	1.051 1401	1.104 6221	1.132 2708	1.160 5408	1.189 4445
11	1.056 3958	1.115 6684	1.146 4242	1.177 9489	1.210 2598
12	1.061 6778	1.126 8250	1.160 7545	1.195 6182	1.231 4393
13	1.066 9862	1.138 0933	1.175 2640	1.213 5524	1.252 9895
14	1.072 3211	1.149 4742	1.189 9548	1.231 7557	1.274 9168
15	1.077 6827	1.160 9690	1.204 8292	1.250 2321	1.297 2279
16	1.083 0712	1.172 5786	1.219 8896	1.268 9856	1.319 9294
17	1.088 4865	1.184 3044	1.235 1382	1.288 0203	1.343 0281
18	1.093 9289	1.196 1475	1.250 5774	1.307 3406	1.366 5311
19	1.099 3986	1.208 1090	1.266 2096	1.326 9508	1.390 4454
20	1.104 8956	1.220 1900	1.282 0372	1.346 8550	1.414 7782
21	1.110 4201	1.232 3919	1.298 0627	1.367 0578	1.439 5368
22	1.115 9722	1.244 7159	1.314 2885	1.387 5637	1.464 7287
23	1.121 5520	1.257 1630	1.330 7171	1.408 3772	1.490 3615
24	1.127 1598	1.269 7346	1.347 3510	1.429 5028	1.516 4428
25	1.132 7956	1.282 4320	1.364 1929	1.450 9454	1.542 9805
26	1.138 4596	1.295 2563	1.381 2454	1.472 7095	1.569 9827
27	1.144 1518	1.308 2089	1.398 5109	1.494 8002	1.597 4574
28	1.149 8726	1.321 2910	1.415 9923	1.517 2222	1.625 4129
29	1.155 6220	1.334 5039	1.433 6922	1.539 9805	1.653 8576
30	1.161 4001	1.347 8489	1.451 6134	1.563 0802	1.682 8001
31	1.167 2071	1.361 3274	1.469 7585	1.586 5264	1.712 2491
32	1.173 0431	1.374 9407	1.488 1305	1.610 3243	1.742 2135
33	1.178 9083	1.388 6901	1.506 7321	1.634 4792	1.772 7022
34	1.184 8029	1.402 5770	1.525 5663	1.658 9964	1.803 7245
35	1.190 7269	1.416 6028	1.544 6359	1.683 8813	1.835 2897
36	1.196 6805	1.430 7688	1.563 9438	1.709 1395	1.867 4073
37	1.202 6639	1.445 0765	1.583 4931	1.734 7766	1.900 0869
38	1.208 6772	1.459 5272	1.603 2868	1.760 7983	1.933 3384
39	1.214 7206	1.474 1225	1.623 3279	1.787 2102	1.967 1718
40	1.220 7942	1.488 8637	1.643 6195	1.814 0184	2.001 5973
41	1.226 8982	1.503 7524	1.664 1647	1.841 2287	2.036 6253
42	1.233 0327	1.518 7899	1.684 9668	1.868 8471	2.072 2662
43	1.239 1979	1.533 9778	1.706 0288	1.896 8798	2.108 5309
44	1.245 3938	1.549 3176	1.727 3542	1.925 3330	2.145 4302
45	1.251 6208	1.564 8108	1.748 9461	1.954 2130	2.182 9752
46	1.257 8789	1.580 4588	1.770 8080	1.983 5262	2.221 1773
47	1.264 1683	1.596 2634	1.792 9431	2.013 2791	2.260 0479
48	1.270 4892	1.612 2261	1.815 3548	2.043 4783	2.299 5987
49	1.276 8416	1.628 3483	1.838 0468	2.074 1305	2.339 8417
50	1.283 2258	1.644 6318	1.861 0224	2.105 2424	2.380 7889
60	1.348 8502	1.816 6967	2.107 1814	2.443 2198	2.831 8163
70	1.417 8305	2.006 7634	2.385 9000	2.853 4563	3.368 2883
80	1.490 3386	2.216 7152	2.701 4849	3.290 6628	4.006 3919
90	1.566 5547	2.448 6327	3.058 8126	3.818 9485	4.765 3808
100	1.646 6685	2.704 8138	3.463 4043	4.432 0456	5.668 1559

Table 8. Compound Amount Tables—(Continued)

AMOUNT OF 1. $a = (1 + i)^n$

n	2%	2⅛%	2¼%	2⅜%	2½%
1	1.020 0000	1.021 2500	1.022 5000	1.023 7500	1.025 0000
2	1.040 4000	1.042 9516	1.045 5062	1.048 0641	1.050 6250
3	1.061 2080	1.065 1143	1.069 0301	1.072 9556	1.076 8906
4	1.082 4322	1.087 7480	1.093 0833	1.098 4383	1.103 8129
5	1.104 0808	1.110 8626	1.117 6777	1.124 5262	1.131 4082
6	1.126 1624	1.134 4684	1.142 8254	1.151 2337	1.159 6934
7	1.148 6857	1.158 5559	1.168 5390	1.178 5755	1.188 6858
8	1.171 6594	1.183 1956	1.194 8311	1.206 5666	1.218 4029
9	1.195 0926	1.208 3385	1.221 7148	1.235 2226	1.248 8630
10	1.218 9944	1.234 0157	1.249 2034	1.264 5592	1.280 0845
11	1.243 3743	1.260 2386	1.277 3105	1.294 5924	1.312 0867
12	1.268 2418	1.287 0186	1.306 0500	1.325 3390	1.344 8888
13	1.293 6066	1.314 3678	1.335 4361	1.356 8158	1.378 5110
14	1.319 4788	1.342 2981	1.365 4834	1.389 0402	1.412 9738
15	1.345 8683	1.370 8219	1.396 2068	1.422 0299	1.448 2982
16	1.372 7857	1.399 9519	1.427 6215	1.445 8031	1.484 5056
17	1.400 2414	1.429 7009	1.459 7429	1.490 3784	1.521 6183
18	1.428 2462	1.460 0820	1.492 5872	1.525 7749	1.559 6587
19	1.456 8112	1.491 1088	1.526 1704	1.562 0120	1.598 6502
20	1.485 9474	1.522 7948	1.560 5092	1.599 1098	1.638 6164
21	1.515 6663	1.555 1542	1.595 6207	1.637 0887	1.679 5818
22	1.545 9797	1.588 2012	1.631 5221	1.675 9696	1.721 5714
23	1.576 8993	1.621 9505	1.668 2314	1.715 7738	1.764 6107
24	1.608 4372	1.656 4170	1.705 7666	1.756 5235	1.808 7260
25	1.640 6060	1.691 6158	1.744 1463	1.798 2409	1.853 9441
26	1.673 4181	1.727 5627	1.783 3896	1.840 9491	1.900 2927
27	1.706 8865	1.764 2734	1.823 5159	1.884 6716	1.947 8000
28	1.741 0242	1.801 7642	1.864 5450	1.929 4326	1.996 4950
29	1.775 8447	1.840 0517	1.906 4972	1.975 2566	2.046 4074
30	1.811 3616	1.879 1528	1.949 3934	2.022 1690	2.097 5676
31	1.847 5888	1.919 0848	1.993 2548	2.070 1955	2.150 0068
32	1.884 5406	1.959 8653	2.038 1030	2.119 3626	2.203 7569
33	1.922 2314	2.001 5124	2.083 9603	2.169 6975	2.258 8509
34	1.960 6760	2.044 0446	2.130 8494	2.221 2278	2.315 3221
35	1.999 8896	2.087 4805	2.178 7936	2.273 9820	2.373 2052
36	2.039 8873	2.131 8395	2.227 8164	2.327 9890	2.432 5353
37	2.080 6851	2.177 1411	2.277 9423	2.383 2788	2.493 3487
38	2.122 2988	2.223 4053	2.329 1960	2.439 8816	2.555 6824
39	2.164 7448	2.270 6527	2.381 6029	2.497 8288	2.619 5745
40	2.208 0397	2.318 9041	2.435 1890	2.557 1523	2.685 0638
41	2.252 2005	2.368 1808	2.489 9807	2.617 8846	2.752 1904
42	2.297 2445	2.418 5046	2.546 0053	2.680 0594	2.820 9952
43	2.343 1894	2.469 8978	2.603 2904	2.743 7108	2.891 5201
44	2.390 0531	2.522 3832	2.661 8644	2.808 8740	2.963 8081
45	2.437 8542	2.575 9838	2.721 7564	2.875 5847	3.037 9033
46	2.486 6113	2.630 7235	2.782 9959	2.943 8798	3.113 8509
47	2.536 3435	2.686 6263	2.845 6133	3.013 7970	3.191 6971
48	2.587 0704	2.743 7172	2.909 6396	3.085 3747	3.271 4896
49	2.638 8118	2.802 0211	2.975 1065	3.158 6523	3.353 2768
50	2.691 5880	2.861 5641	3.042 0464	3.233 6703	3.437 1087
60	3.281 0308	3.531 2151	3.800 1348	4.089 1674	4.399 7898
70	3.999 5582	4.357 5750	4.747 1414	5.170 9940	5.632 1029
80	4.875 4392	5.377 3161	5.930 1453	6.539 0278	7.209 5678
90	5.943 1331	6.635 6926	7.407 9578	8.268 9874	9.228 8563
100	7.244 6461	8.188 5490	9.254 0463	10.456 6236	11.813 7164

Table 8. Compound Amount Tables—(Continued)

AMOUNT OF 1. $a = (1 + i)^n$

n	3%	3½%	4%	4¼%	4½%
1	1.030 0000	1.035 0000	1.040 0000	1.042 5000	1.045 0000
2	1.060 9000	1.071 2250	1.081 6000	1.086 8062	1.092 0250
3	1.092 7270	1.108 7179	1.124 8640	1.132 9955	1.141 1661
4	1.125 5088	1.147 5230	1.169 8586	1.181 1478	1.192 5186
5	1.159 2741	1.187 6863	1.216 6529	1.231 3466	1.246 1819
6	1.194 0523	1.229 2553	1.265 3190	1.283 6788	1.302 2601
7	1.229 8739	1.272 2793	1.315 9318	1.338 2352	1.360 8618
8	1.266 7701	1.316 8090	1.368 5690	1.395 1102	1.422 1006
9	1.304 7732	1.361 8974	1.423 3118	1.454 4024	1.486 0951
10	1.343 9164	1.410 5988	1.480 2443	1.516 2145	1.552 9694
11	1.384 2339	1.459 9697	1.539 4541	1.580 6536	1.622 8530
12	1.425 7609	1.511 0687	1.601 0322	1.647 8314	1.695 8814
13	1.468 5337	1.563 9561	1.665 0735	1.717 8642	1.772 1961
14	1.512 5897	1.618 6945	1.731 6764	1.790 8734	1.851 9449
15	1.557 9674	1.675 3488	1.800 9435	1.866 9855	1.935 2824
16	1.604 7064	1.733 9860	1.872 9812	1.946 3324	2.022 3702
17	1.652 8476	1.794 6756	1.947 9005	2.029 0516	2.113 3768
18	1.702 4331	1.857 4892	2.025 8165	2.115 2862	2.208 4788
19	1.753 5060	1.922 5013	2.106 8492	2.205 1859	2.307 8603
20	1.806 1112	1.989 7889	2.191 1231	2.298 9063	2.411 7140
21	1.860 2946	2.059 4315	2.278 7681	2.396 6098	2.520 2412
22	1.916 1034	2.131 5116	2.369 9188	2.498 4658	2.633 6520
23	1.973 5865	2.206 1145	2.464 7155	2.604 6505	2.752 1664
24	2.032 7941	2.283 3285	2.563 3042	2.715 3482	2.876 0138
25	2.093 7779	2.363 2450	2.665 8363	2.830 7505	3.005 4345
26	2.156 5913	2.445 9586	2.772 4698	2.951 0574	3.140 6790
27	2.221 2890	2.531 5671	2.883 3686	3.076 4773	3.282 0096
28	2.287 9277	2.620 1720	2.998 7033	3.207 2276	3.429 7000
29	2.356 5655	2.711 8780	3.118 6514	3.343 5348	3.584 0365
30	2.427 2625	2.806 7937	3.243 3975	3.485 6350	3.745 3181
31	2.500 0804	2.905 0315	3.373 1334	3.633 7745	3.913 8574
32	2.575 0828	3.006 7076	3.508 0588	3.788 2099	4.089 9810
33	2.652 3352	3.111 9424	3.648 3811	3.949 2088	4.274 0302
34	2.731 9053	3.220 8603	3.794 3163	4.117 0502	4.466 3615
35	2.813 8624	3.333 5904	3.946 0890	4.292 0248	4.667 3478
36	2.898 2783	3.450 2661	4.103 9326	4.474 4359	4.877 3785
37	2.985 2267	3.571 0254	4.268 0899	4.664 5994	5.096 8605
38	3.074 7835	3.696 0113	4.438 8134	4.862 8449	5.326 2192
39	3.167 0270	3.825 3717	4.616 3660	5.069 5158	5.565 8991
40	3.262 0378	3.959 2597	4.801 0206	5.284 9702	5.816 3645
41	3.359 8989	4.097 8338	4.993 0614	5.509 5815	6.078 1009
42	3.460 6959	4.241 2580	5.192 7839	5.743 7387	6.351 6155
43	3.564 5168	4.389 7020	5.400 4953	5.987 8476	6.637 4382
44	3.671 4523	4.543 3416	5.616 5151	6.242 3311	6.936 1229
45	3.781 5958	4.702 3586	5.841 1757	6.507 6302	7.248 2484
46	3.895 0437	4.866 9411	6.074 8227	6.784 2044	7.574 4196
47	4.011 8950	5.037 2840	6.317 8156	7.072 5331	7.915 2685
48	4.132 2519	5.213 5890	6.570 5282	7.373 1158	8.271 4556
49	4.256 2194	5.396 0646	6.833 3494	7.686 4732	8.643 6711
50	4.383 9060	5.584 9269	7.106 6834	8.013 1483	9.032 6363
60	5.891 6031	7.878 0909	10.519 6274	12.149 6514	14.027 4079
70	7.917 8219	11.112 8253	15.571 6184	18.421 4773	21.784 1356
80	10.640 8906	15.675 7375	23.049 7991	27.930 9104	33.830 0964
90	14.300 4671	22.112 1760	34.119 3333	42.349 2505	52.537 1053
00	19.218 6320	31.191 4080	50.504 9482	64.210 5462	81.588 5180

Table 8. Compound Amount Tables—(Continued)

AMOUNT OF 1. $a = (1 + i)^n$

n	4¾%	5%	6%	7%	8%
1	1.047 5000	1.050 0000	1.060 0000	1.070 0000	1.080 0000
2	1.037 2562	1.102 5000	1.123 6000	1.144 9000	1.166 4000
3	1.149 3759	1.157 6250	1.191 0160	1.225 0430	1.259 7120
4	1.203 9713	1.215 5062	1.262 4770	1.310 7960	1.360 4890
5	1.261 1599	1.276 2816	1.338 2256	1.402 5517	1.469 3281
6	1.321 0650	1.340 0956	1.418 5191	1.500 7304	1.586 8743
7	1.383 8156	1.407 1004	1.503 6303	1.605 7815	1.713 8243
8	1.449 5468	1.477 4554	1.593 8481	1.718 1862	1.850 9302
9	1.518 4003	1.551 3282	1.689 4790	1.838 4592	1.999 0046
10	1.590 5243	1.628 8946	1.790 8477	1.967 1514	2.158 9250
11	1.666 0742	1.710 3394	1.898 2986	2.104 8520	2.331 6390
12	1.745 2128	1.795 8563	2.012 1965	2.252 1916	2.518 1701
13	1.828 1104	1.885 6491	2.132 9283	2.409 8450	2.719 6237
14	1.914 9456	1.979 9316	2.260 9040	2.578 5342	2.937 1936
15	2.005 9055	2.078 9282	2.396 5582	2.759 0315	3.172 1691
16	2.101 1860	2.182 8746	2.540 3517	2.952 1638	3.425 9426
17	2.200 9924	2.292 0183	2.692 7728	3.158 8152	3.700 0180
18	2.305 5395	2.406 6192	2.854 3392	3.379 9323	3.996 0195
19	2.415 0526	2.526 9502	3.025 5995	3.616 5275	4.315 7011
20	2.529 7676	2.653 2977	3.207 1355	3.869 6845	4.660 9571
21	2.649 9316	2.785 9626	3.399 5636	4.140 5624	5.033 8337
22	2.775 8034	2.925 2607	3.603 5374	4.430 4017	5.436 5404
23	2.907 6540	3.071 5238	3.819 7497	4.740 5299	5.871 4636
24	3.045 7676	3.225 0999	4.048 9346	5.072 3670	6.341 1807
25	3.190 4415	3.386 3549	4.291 8707	5.427 4326	6.848 4752
26	3.341 9875	3.555 6727	4.549 3830	5.807 3529	7.396 3532
27	3.500 7319	3.733 4563	4.822 3459	6.213 8676	7.988 0615
28	3.667 0167	3.920 1291	5.111 6867	6.648 8384	8.627 1064
29	3.841 2000	4.116 1356	5.418 3879	7.114 2570	9.317 2749
30	4.023 6570	4.321 9424	5.743 4912	7.612 2550	10.062 6569
31	4.214 7807	4.538 0395	6.088 1006	8.145 1129	10.867 6694
32	4.414 9828	4.764 9415	6.453 3867	8.715 2708	11.737 0830
33	4.624 6944	5.003 1885	6.840 5899	9.325 3398	12.676 0496
34	4.844 3674	5.253 3480	7.251 0253	9.978 1135	13.690 1336
35	5.074 4749	5.516 0154	7.686 0868	10.676 5815	14.785 3443
36	5.315 5124	5.791 8161	8.147 2520	11.423 9422	15.968 1718
37	5.567 9993	6.081 4069	8.636 0871	12.223 6181	17.245 6256
38	5.832 4792	6.385 4773	9.154 2524	13.079 2714	18.625 2756
39	6.109 5220	6.704 7512	9.703 5075	13.994 8204	20.115 2977
40	6.399 7243	7.039 9887	10.285 7179	14.974 4578	21.724 5215
41	6.703 7112	7.391 9882	10.902 8610	16.022 6699	23.462 4832
42	7.022 1375	7.761 5876	11.557 0327	17.144 2568	25.339 4819
43	7.355 6890	8.149 6669	12.250 4546	18.344 3548	27.366 6404
44	7.705 0843	8.557 1503	12.985 4819	19.628 4596	29.555 9717
45	8.071 0758	8.985 0078	13.764 6108	21.002 4518	31.920 4494
46	8.454 4519	9.434 2582	14.590 4875	22.472 6234	34.474 0853
47	8.856 0383	9.905 9711	15.465 9167	24.045 7070	37.232 0122
48	9.276 7001	10.401 2696	16.393 8717	25.728 9065	40.210 5731
49	9.717 3434	10.921 3331	17.377 5040	27.529 9300	43.427 4190
50	10.178 9172	11.467 3998	18.420 1543	29.457 0251	46.901 6125
60	16.189 8154	18.679 1859	32.987 6908	57.946 4268	101.257 0637
70	25.750 2954	30.426 4255	59.075 9302	113.989 3922	218.606 4059
80	40.956 4712	49.561 4411	105.795 9935	224.234 3876	471.954 8343
90	65.142 2639	80.730 3650	189.464 5112	441.102 9799	1018.915 0893
100	103.610 3555	131.501 2578	339.302 0835	867.716 3256	2199.761 2563

Table 9. Present Value

PRESENT VALUE OF 1. $P.V. = \frac{1}{(1+i)^n}$

n	½%	1%	1¼%	1½%	1¾%
1	.995 0249	.990 0990	.987 6543	.985 2217	.982 8010
2	.990 0745	.980 2960	.975 4611	.970 6618	.965 8978
3	.985 1488	.970 5902	.963 4183	.956 3170	.949 2853
4	.980 2475	.960 9803	.951 5243	.942 1842	.932 9585
5	.975 3707	.951 4657	.939 7771	.928 2603	.916 9125
6	.970 5181	.942 0452	.928 1749	.914 5422	.901 1425
7	.965 6896	.932 7180	.916 7159	.901 0268	.885 6438
8	.960 8852	.923 4832	.905 3984	.887 7111	.870 4116
9	.956 1047	.914 3398	.894 2207	.874 5922	.855 4414
10	.951 3479	.905 2870	.883 1809	.861 6672	.840 7286
11	.946 6149	.896 3237	.872 2775	.848 9332	.826 2689
12	.941 9053	.887 4492	.861 5086	.836 3874	.812 0579
13	.937 2192	.878 6626	.850 8727	.824 0270	.798 0913
14	.932 5565	.869 9630	.840 3681	.811 8493	.784 3649
15	.927 9169	.861 3495	.829 9932	.799 8515	.770 8746
16	.923 3004	.852 8213	.819 7464	.788 0310	.757 6163
17	.918 7068	.844 3775	.809 6260	.776 3853	.744 5860
18	.914 1362	.836 0173	.799 6306	.764 9116	.731 7799
19	.909 5882	.827 7399	.789 7587	.753 6075	.719 1940
20	.905 0629	.819 5445	.780 0086	.742 4704	.706 8246
21	.900 5601	.811 4302	.770 3788	.731 4980	.694 6679
22	.896 0797	.803 3962	.760 8680	.720 6876	.682 7203
23	.891 6216	.795 4418	.751 4745	.710 0371	.670 9782
24	.887 1857	.787 5661	.742 1971	.699 5439	.659 4380
25	.882 7718	.779 7684	.733 0341	.689 2058	.648 0963
26	.878 3799	.772 0480	.723 9843	.679 0205	.636 9497
27	.874 0099	.764 4039	.715 0463	.668 9857	.625 9948
28	.869 6616	.756 8356	.706 2185	.659 0992	.615 2283
29	.865 3349	.749 3422	.697 4998	.649 3589	.604 6470
30	.861 0297	.741 9229	.688 8887	.639 7624	.594 2476
31	.856 7460	.734 5772	.680 3839	.630 3078	.584 0272
32	.852 4836	.727 3041	.671 9841	.620 9929	.573 9825
33	.848 2424	.720 1031	.663 6880	.611 8157	.564 1105
34	.844 0223	.712 9733	.655 4943	.602 7741	.554 4084
35	.839 8231	.705 9142	.647 4018	.593 8661	.544 8731
36	.835 6449	.698 9250	.639 4092	.585 0897	.535 5018
37	.831 4875	.692 0049	.631 5152	.576 4431	.526 2917
38	.827 3507	.685 1534	.623 7187	.567 9242	.517 2400
39	.823 2346	.678 3697	.616 0185	.559 5313	.508 3440
40	.819 1389	.671 6531	.608 4133	.551 2623	.499 6010
41	.815 0635	.665 0031	.600 9021	.543 1156	.491 0083
42	.811 0085	.658 4189	.593 4835	.535 0892	.482 5635
43	.806 9736	.651 8999	.586 1566	.527 1815	.474 2639
44	.802 9588	.645 4455	.578 9201	.519 3907	.466 1070
45	.798 9640	.639 0549	.571 7729	.511 7149	.458 0904
46	.794 9891	.632 7276	.564 7140	.504 1526	.450 2117
47	.791 0339	.626 4630	.557 7422	.496 7021	.442 4685
48	.787 0984	.620 2604	.550 8565	.489 3617	.434 8585
49	.783 1825	.614 1192	.544 0558	.482 1298	.427 3793
50	.779 2861	.608 0388	.537 3390	.475 0047	.420 0288
60	.741 3722	.550 4496	.474 5676	.409 2960	.353 1302
70	.705 3029	.498 3149	.419 1290	.352 6769	.296 8867
80	.670 9885	.451 1179	.370 1668	.303 8902	.249 6011
90	.638 3435	.408 3912	.326 9242	.261 8522	.209 8468
00	.607 2868	.369 7112	.288 7333	.225 6294	.176 4242

Table 9. Present Value—(Continued)

PRESENT VALUE OF 1. $P.V. = \frac{1}{(1+i)^n}$

n	2%	2⅛%	2¼%	2⅜%	2½%
1	.980 3922	.979 1922	.977 9951	.976 8010	.975 6098
2	.961 1688	.958 8173	.956 4744	.954 1402	.951 8144
3	.942 3223	.938 8664	.935 4273	.932 0050	.928 5994
4	.923 8454	.919 3306	.914 8434	.910 3834	.905 9506
5	.905 7308	.900 2013	.894 7123	.889 2634	.883 8543
6	.887 9714	.881 4701	.875 0243	.868 6334	.862 2969
7	.870 5602	.863 1286	.855 7695	.848 4819	.841 2652
8	.853 4904	.845 1688	.836 9384	.828 7980	.820 7466
9	.836 7553	.827 5826	.818 5216	.809 5707	.800 7284
10	.820 3483	.810 3624	.800 5101	.790 7894	.781 1984
11	.804 2630	.793 5006	.782 8950	.772 4439	.762 1448
12	.788 4932	.776 9895	.765 6675	.754 5239	.743 5559
13	.773 0325	.760 8221	.748 8190	.737 0197	.725 4204
14	.757 8750	.744 9910	.732 3414	.719 9216	.707 7272
15	.743 0147	.729 4894	.716 2263	.703 2201	.690 4656
16	.728 4458	.714 3103	.700 4658	.686 9061	.673 6249
17	.714 1626	.699 4470	.685 0521	.670 9705	.657 1951
18	.700 1594	.684 8930	.669 9776	.655 4047	.641 1659
19	.686 4308	.670 6419	.655 2348	.640 1999	.625 5277
20	.672 9713	.656 6873	.640 8165	.625 3479	.610 2709
21	.659 7758	.643 0230	.626 7154	.610 8404	.595 3863
22	.646 8390	.629 6431	.612 9246	.596 6696	.580 8647
23	.634 1559	.616 5416	.599 4372	.582 8274	.566 6972
24	.621 7215	.603 7127	.586 2467	.569 3064	.552 8754
25	.609 5309	.591 1508	.573 3464	.556 0990	.539 3906
26	.597 5793	.578 8502	.560 7300	.543 1981	.526 2347
27	.585 8620	.566 8056	.548 3912	.530 5964	.513 3997
28	.574 3746	.555 0116	.536 3239	.518 2871	.500 8778
29	.563 1123	.543 4630	.524 5221	.506 2633	.488 6612
30	.552 0709	.532 1547	.512 9801	.494 5185	.476 7427
31	.541 2460	.521 0817	.501 6920	.483 0462	.465 1148
32	.530 6333	.510 2392	.490 6523	.471 8400	.453 7706
33	.520 2287	.499 6222	.479 8556	.460 8937	.442 7030
34	.510 0282	.489 2261	.469 2964	.450 2015	.431 9053
35	.500 0276	.479 0464	.458 9696	.439 7572	.421 3711
36	.490 2232	.469 0785	.448 8700	.429 5553	.411 0937
37	.480 6109	.459 3180	.438 9927	.419 5900	.401 0670
38	.471 1872	.449 7606	.429 3327	.409 8559	.391 2849
39	.461 9482	.440 4020	.419 8853	.400 3477	.381 7414
40	.452 8904	.431 2382	.410 6458	.391 0600	.372 4306
41	.444 0102	.422 2651	.401 6095	.381 9878	.363 3470
42	.435 3041	.413 4786	.392 7722	.373 1261	.354 4848
43	.426 7688	.404 8750	.384 1292	.364 4699	.345 8389
44	.418 4007	.396 4505	.375 6765	.356 0146	.337 4038
45	.410 1968	.388 2012	.367 4098	.347 7554	.329 1744
46	.402 1537	.380 1236	.359 3250	.339 6878	.321 1458
47	.394 2684	.372 2140	.351 4181	.331 8074	.313 3129
48	.386 5376	.364 4691	.343 6852	.324 1098	.305 6712
49	.378 9584	.356 8852	.336 1224	.316 5907	.298 2158
50	.371 5279	.349 4592	.328 7261	.309 2461	.290 9422
60	.304 7823	.283 1886	.263 1486	.244 5486	.227 2836
70	.250 0276	.229 4854	.210 6531	.193 3864	.177 5536
80	.205 1097	.185 9664	.168 6299	.152 9279	.138 7046
90	.168 2614	.150 7002	.134 9900	.120 9338	.108 3558
100	.138 0330	.122 1218	.108 0608	.095 6332	.084 6474

Table 9. Present Value—(Continued)

PRESENT VALUE OF 1. $P.\ V. = \frac{1}{(1+i)^n}$

n	3%	3½%	4%	4¼%	4½%
1	.970 8738	.966 1836	.961 5385	.959 2326	.956 9378
2	.942 5959	.933 5107	.924 5562	.920 1272	.915 7300
3	.915 1417	.901 9427	.888 9964	.882 6160	.876 2966
4	.888 4870	.871 4422	.854 8042	.846 6341	.838 5613
5	.862 6088	.841 9732	.821 9271	.812 1190	.802 4510
6	.837 4843	.813 5006	.790 3145	.779 0110	.767 8957
7	.813 0915	.785 9910	.759 9178	.747 2528	.734 8285
8	.789 4092	.759 4116	.730 6902	.716 7893	.703 1851
9	.766 4167	.733 7310	.702 5867	.687 5676	.672 9044
10	.744 0939	.708 9188	.675 5642	.659 5373	.643 9277
11	.722 4213	.684 9457	.649 5809	.632 6497	.616 1987
12	.701 3799	.661 7833	.624 5970	.606 8582	.589 6639
13	.680 9513	.639 4042	.600 5741	.582 1182	.564 2716
14	.661 1178	.617 7818	.577 4751	.558 3868	.539 9729
15	.641 8620	.596 8906	.555 2645	.535 6228	.516 7204
16	.623 1669	.576 7059	.533 9082	.513 7868	.494 4693
17	.605 0164	.557 2038	.513 3732	.492 8411	.473 1764
18	.587 3946	.538 3611	.493 6281	.472 7493	.452 8004
19	.570 2860	.520 1557	.474 6424	.453 4765	.433 3018
20	.553 6758	.502 5659	.456 3870	.434 9894	.414 6429
21	.537 5493	.485 5709	.438 8336	.417 2561	.396 7874
22	.521 8925	.469 1506	.421 9554	.400 2456	.379 7009
23	.506 6918	.453 2856	.405 7263	.383 9287	.363 3501
24	.491 9337	.437 9571	.390 1215	.368 2769	.347 7035
25	.477 6056	.423 1470	.375 1168	.353 2632	.332 7306
26	.463 6947	.408 8377	.360 6892	.338 8616	.318 4025
27	.450 1891	.395 0122	.346 8166	.325 0471	.304 6914
28	.437 0768	.381 6543	.333 4775	.311 7958	.291 5707
29	.424 3464	.368 7482	.320 6514	.299 0847	.279 0150
30	.411 9868	.356 2784	.308 3187	.286 8918	.267 0000
31	.399 9872	.344 2304	.296 4603	.275 1959	.255 5024
32	.388 3370	.332 5897	.285 0579	.263 9769	.244 4999
33	.377 0262	.321 3427	.274 0942	.253 2153	.233 9712
34	.366 0449	.310 4760	.263 5521	.242 8924	.223 8959
35	.355 3834	.299 9769	.253 4155	.232 9903	.214 2544
36	.345 0324	.289 8327	.243 6687	.223 4919	.205 0282
37	.334 9829	.280 0316	.234 2968	.214 3807	.196 1992
38	.325 2262	.270 5619	.225 2854	.205 6409	.187 7504
39	.315 7536	.261 4125	.216 6206	.197 2575	.179 6655
40	.306 5568	.252 5725	.208 2890	.189 2158	.171 9287
41	.297 6280	.244 0314	.200 2779	.181 5020	.164 5251
42	.288 9592	.235 7791	.192 5749	.174 1026	.157 4403
43	.280 5429	.227 8059	.185 1682	.167 0049	.150 6605
44	.272 3718	.220 1023	.178 0464	.160 1966	.144 1728
45	.264 4386	.212 6592	.171 1984	.153 6658	.137 9644
46	.256 7365	.205 4679	.164 6139	.147 4012	.132 0233
47	.249 2588	.198 5197	.158 2826	.141 3921	.126 3381
48	.241 9988	.191 8064	.152 1948	.135 6279	.120 8977
49	.234 9503	.185 3202	.146 3411	.130 0987	.115 6916
50	.228 1071	.179 0534	.140 7126	.124 7949	.110 7096
60	.169 7331	.126 9343	.095 0604	.082 3069	.071 2890
70	.126 2974	.089 9861	.064 2194	.054 2845	.045 9050
80	.093 9771	.063 7928	.043 3843	.035 8026	.029 5595
90	.069 9278	.045 2240	.029 3089	.023 6132	.019 0342
00	.052 0328	.032 0601	.019 8000	.015 5738	.012 2566

Table 9. Present Value—(Continued)

PRESENT VALUE OF 1. $P.V. = \frac{1}{(1+i)^n}$

n	4¼%	5%	6%	7%	8%
1	.954 6539	.952 3810	.943 3962	.934 5794	.925 9259
2	.911 3641	.907 0295	.889 9964	.873 4387	.857 3388
3	.870 0374	.863 8376	.839 6193	.816 2979	.793 8322
4	.830 5846	.822 7025	.792 0937	.762 8952	.735 0298
5	.792 9209	.783 5262	.747 2582	.712 9862	.680 5832
6	.756 9650	.746 2154	.704 9605	.666 3422	.630 1696
7	.722 6396	.710 6813	.665 0571	.622 7497	.583 4904
8	.689 8708	.676 8394	.627 4124	.582 0091	.540 2689
9	.658 5878	.644 6089	.591 8985	.543 9337	.500 2490
10	.628 7235	.613 9132	.558 3948	.508 3493	.463 1935
11	.600 2134	.584 6793	.526 7875	.475 0928	.428 8829
12	.572 9960	.556 8374	.496 9694	.444 0120	.397 1138
13	.547 0129	.530 3214	.468 8390	.414 9644	.367 6979
14	.522 2080	.505 0680	.442 3010	.387 8172	.340 4610
15	.498 5280	.481 0171	.417 2651	.362 4460	.315 2417
16	.475 9217	.458 1115	.393 6463	.338 7346	.291 8905
17	.454 3405	.436 2967	.371 3644	.316 5744	.270 2690
18	.433 7380	.415 5206	.350 3438	.295 8639	.250 2490
19	.414 0696	.395 7340	.330 5130	.276 5083	.231 7121
20	.395 2932	.376 8895	.311 8047	.258 4190	.214 5482
21	.377 3682	.358 9424	.294 1554	.241 5131	.198 6558
22	.360 2561	.341 8499	.277 5051	.225 7132	.183 9405
23	.343 9199	.325 5713	.261 7973	.210 9469	.170 3153
24	.328 3245	.310 0679	.246 9786	.197 1466	.157 6993
25	.313 4362	.295 3028	.232 9986	.184 2492	.146 0179
26	.299 2231	.281 2407	.219 8100	.172 1955	.135 2018
27	.285 6546	.267 8483	.207 3680	.160 9304	.125 1868
28	.272 7012	.255 0936	.195 6301	.150 4022	.115 9137
29	.260 3353	.242 9463	.184 5567	.140 5628	.107 3275
30	.248 5301	.231 3774	.174 1101	.131 3671	.099 3773
31	.237 2603	.220 3595	.164 2548	.122 7730	.092 0160
32	.226 5014	.209 8662	.154 9574	.114 7411	.085 2000
33	.216 2305	.199 8725	.146 1862	.107 2347	.078 8889
34	.206 4253	.190 3548	.137 9115	.100 2193	.073 0453
35	.197 0647	.181 2903	.130 1052	.093 6629	.067 6345
36	.188 1286	.172 6574	.122 7408	.087 5355	.062 6246
37	.179 5977	.164 4356	.115 7932	.081 8088	.057 9857
38	.171 4537	.156 6054	.109 2388	.076 4569	.053 6905
39	.163 6789	.149 1480	.103 0555	.071 4550	.049 7134
40	.156 2567	.142 0457	.097 2222	.066 7804	.046 0309
41	.149 1711	.135 2816	.091 7190	.062 4116	.042 6212
42	.142 4068	.128 8396	.086 5274	.058 3286	.039 4641
43	.135 9492	.122 7044	.081 6296	.054 5127	.036 5408
44	.129 7844	.116 8613	.077 0091	.050 9464	.033 8341
45	.123 8992	.111 2965	.072 6501	.047 6135	.031 3279
46	.118 2809	.105 9967	.068 5378	.044 4986	.029 0073
47	.112 9173	.100 9492	.064 6583	.041 5875	.026 8586
48	.107 7970	.096 1421	.060 9984	.038 8668	.024 8691
49	.102 9088	.091 5639	.057 5457	.036 3241	.023 0269
50	.098 2423	.087 2037	.054 2884	.033 9478	.021 3212
60	.061 7672	.053 5355	.030 3143	.017 2573	.009 8758
70	.038 8345	.032 8662	.016 9274	.008 7728	.004 5744
80	.024 4162	.020 1770	.009 4522	.004 4596	.002 1188
90	.015 3510	.012 3869	.005 2780	.002 2670	.000 9814
100	.009 6515	.007 6045	.002 9472	.001 1524	.000 4546

Annuities

ANNUITY.—An annuity is the payment or receipt of a fixed sum of money at uniform intervals of time. An **example** of an annuity is rent on the use of property. Payments of annuities are often called **rents.**

Ordinary Annuity.—An annuity payment is generally made or received at the close of a period of time. This is an **ordinary annuity or an annuity certain.**

Annuity Due.—An annuity due is one in which the payment is made or received at the beginning of a period. A **life insurance premium** paid in advance is an example of an annuity due.

Deferred Annuity.—A deferred annuity is one in which payment is to be made or received after a number of periods have elapsed.

Amount of Annuity.—The total of all annuity payments made or received is the amount of annuity.

Annuity in Perpetuity.—An annuity in which the payments continue indefinitely is a perpetuity. An example of this type is to be found in the payment made from endowment funds.

AMOUNT OF AN ORDINARY ANNUITY.—The **formula** for determining the amount of an ordinary annuity is as follows:

$$A = \frac{(1+i)^n - 1}{i} = \frac{a-1}{i}$$

Where A = amount of annuity
$a-1$ = compound interest for the number of periods (n)
n = the number of periods
i = simple interest per period

This formula is readily remembered when stated in the following way: The amount of annuity is the compound interest accumulated during the time the annuity runs, divided by the simple interest for one period. Table 10 will simplify the computations which are ordinarily met with in business.

Example: To find the amount of an annuity of $2,000 received semi-annually for 10 years when invested at 4% per annum:

In the amount of annuity table for 20 periods in the 2% column the factor is found to be 24.2973698. Multiply this factor by 2,000,

$$\$2{,}000 \times 24.2973698 = \$48{,}594.74$$

The Amount of an Annuity Due.—In the case of an annuity due the payments are made at the beginning rather than at the close of the period in which case there is one more interest payment than in the previous illustration.

Thus the amount of an annuity due, using the preceding example will mean adding to the amount of $48,594.74 interest on that sum at 2%, or $971.89.

Amount of annuity due = $48,594.74 + $971.89 = $49,566.63

Table 10. Amount of Annuity

AMOUNT OF 1 PER ANNUM. $A = \dfrac{(1+i)^n - 1}{i} = \dfrac{a-1}{i}$

n	½%	1%	1¼%	1½%	1¾%
1	1.000 0000	1.000 0000	1.000 0000	1.000 0000	1.000 0000
2	2.005 0000	2.010 0000	2.012 5000	2.015 0000	2.017 5000
3	3.015 0250	3.030 1000	3.037 6562	3.045 2250	3.052 8062
4	4.030 1001	4.060 4010	4.075 6270	4.090 9034	4.106 2304
5	5.050 2506	5.101 0050	5.126 5723	5.152 2669	5.178 0894
6	6.075 5019	6.152 0151	6.190 6544	6.229 5509	6.268 7060
7	7.105 8794	7.213 5352	7.268 0376	7.322 9942	7.378 4083
8	8.141 4088	8.285 6706	8.358 8881	8.432 8391	8.507 5304
9	9.182 1158	9.368 5273	9.463 3742	9.559 3317	9.656 4122
10	10.228 0264	10.462 2125	10.581 6664	10.702 7217	10.825 3994
11	11.279 1665	11.566 8347	11.713 9372	11.863 2625	12.014 8439
12	12.335 5624	12.682 5030	12.860 3614	13.041 2114	13.225 1037
13	13.397 2402	13.809 3280	14.021 1159	14.236 8296	14.456 5430
14	14.464 2264	14.947 4213	15.196 3799	15.450 3820	15.709 5325
15	15.536 5475	16.096 8955	16.386 3346	16.682 1378	16.984 4494
16	16.614 2303	17.257 8645	17.591 1638	17.932 3698	18.281 6772
17	17.697 3014	18.430 4431	18.811 0534	19.201 3554	19.601 6066
18	18.785 7879	19.614 7476	20.046 1915	20.489 3757	20.944 6347
19	19.879 7168	20.810 8950	21.296 7689	21.796 7164	22.311 1658
20	20.979 1154	22.019 0040	22.562 9785	23.123 6671	23.701 6112
21	22.084 0110	23.239 1940	23.845 0158	24.470 5221	25.116 3894
22	23.194 4311	24.471 5860	25.143 0785	25.837 5799	26.555 9262
23	24.310 4032	25.716 3018	26.457 3670	27.225 1436	28.020 6549
24	25.431 9552	26.973 4648	27.788 0840	28.633 5208	29.511 0164
25	26.559 1150	28.243 1995	29.135 4351	30.063 0236	31.027 4592
26	27.691 9106	29.525 6315	30.499 6280	31.513 9690	32.570 4397
27	28.830 3702	30.820 8878	31.880 8734	32.986 6785	34.140 4224
28	29.974 5220	32.129 0967	33.279 3843	34.481 4787	35.737 8798
29	31.124 3946	33.450 3877	34.695 3766	35.998 7008	37.363 2927
30	32.280 0166	34.784 8915	36.129 0688	37.538 6814	39.017 1503
31	33.441 4167	36.132 7404	37.580 6822	39.101 7616	40.699 9504
32	34.608 6238	37.494 0678	39.050 4407	40.688 2880	42.412 1996
33	35.781 6669	38.869 0085	40.538 5712	42.298 6123	44.154 4130
34	36.960 5752	40.257 6986	42.045 3033	43.933 0915	45.927 1153
35	38.145 3781	41.660 2756	43.570 8696	45.592 0879	47.730 8398
36	39.336 1050	43.076 8784	45.115 5055	47.275 9692	49.566 1295
37	40.532 7855	44.507 6471	46.679 4493	48.985 1087	51.433 5368
38	41.735 4494	45.952 7236	48.262 9424	50.719 8854	53.333 6236
39	42.944 1267	47.412 2508	49.866 2292	52.480 6837	55.266 9621
40	44.158 8473	48.886 3734	51.489 5571	54.267 8939	57.234 1339
41	45.379 6415	50.375 2371	53.133 1765	56.081 9123	59.235 7312
42	46.606 5397	51.878 9895	54.797 3412	57.923 1410	61.272 3565
43	47.839 5724	53.397 7794	56.482 3080	59.791 9881	63.344 6228
44	49.078 7703	54.931 7572	58.188 3369	61.688 8679	65.453 1537
45	50.324 1642	56.481 0747	59.915 6911	63.614 2010	67.598 5839
46	51.575 7850	58.045 8855	61.664 6372	65.568 4140	69.781 5591
47	52.833 6639	59.626 3443	63.435 4452	67.551 9402	72.002 7364
48	54.097 8322	61.222 6078	65.228 3882	69.565 2193	74.262 7842
49	55.368 3214	62.834 8338	67.043 7431	71.608 6976	76.562 3830
50	56.645 1630	64.463 1822	68.881 7899	73.682 8280	78.902 2247
60	69.770 0305	81.669 6699	88.574 5078	96.214 6517	104.675 2159
70	83.566 1055	100.676 3368	110.871 9978	122.363 7530	135.330 7583
80	98.067 7136	121.671 5217	136.118 7953	152.710 8525	171.793 8242
90	113.310 9358	144.863 2675	164.705 0076	187.929 9004	215.164 6172
100	129.333 6984	170.481 3829	197.072 3420	228.803 0433	266.751 7679

Table 10. Amount of Annuity—(Continued)

AMOUNT OF 1 PER ANNUM. $A = \frac{(1+i)^n - 1}{i} = \frac{a-1}{i}$

n	2%	2⅛%	2¼%	2⅜%	2½%
1	1.000 0000	1.000 0000	1.000 0000	1.000 0000	1.000 0000
2	2.020 0000	2.021 2500	2.022 5000	2.023 7500	2.025 0000
3	3.060 4000	3.064 2016	3.068 0062	3.071 8141	3.075 6250
4	4.121 6080	4.129 3158	4.137 0364	4.144 7696	4.152 5156
5	5.204 0402	5.217 0638	5.230 1197	5.243 2079	5.256 3285
6	6.308 1210	6.327 9264	6.347 7974	6.367 7341	6.387 7367
7	7.434 2834	7.462 3948	7.490 6228	7.518 9678	7.547 4302
8	8.582 9690	8.620 9707	8.659 1619	8.697 5433	8.736 1159
9	9.754 6284	9.804 1664	9.853 9930	9.904 1099	9.954 5188
10	10.949 7210	11.012 5049	11.075 7078	11.139 3326	11.203 3818
11	12.168 7154	12.246 5206	12.324 9113	12.403 8917	12.483 4663
12	13.412 0897	13.506 7592	13.602 2218	13.698 4841	13.795 5530
13	14.680 3315	14.793 7778	14.908 2718	15.023 8231	15.140 4418
14	15.973 9382	16.108 1456	16.243 7079	16.380 6389	16.518 9528
15	17.293 4169	17.450 4437	17.609 1913	17.769 6791	17.931 9267
16	18.639 2852	18.821 2656	19.005 3981	19.191 7090	19.380 2248
17	20.012 0710	20.221 2175	20.433 0196	20.647 5121	20.864 7304
18	21.412 3124	21.650 9184	21.892 7625	22.137 8905	22.386 3487
19	22.840 5586	23.111 0004	23.385 3497	23.663 6654	23.946 0074
20	24.297 3698	24.602 1092	24.911 5200	25.225 6774	25.544 6576
21	25.783 3172	26.124 9040	26.472 0292	26.824 7873	27.183 2740
22	27.298 9835	27.680 0582	28.067 6499	28.461 8760	28.862 8559
23	28.844 9632	29.268 2594	29.699 1720	30.137 8455	30.584 4273
24	30.421 8625	30.890 2100	31.367 4034	31.853 6194	32.349 0380
25	32.030 2997	32.546 6269	33.073 1700	33.610 1428	34.157 7639
26	33.670 9057	34.238 2427	34.817 3163	35.408 3837	36.011 7080
27	35.344 3238	35.965 8054	36.600 7059	37.249 3328	37.912 0007
28	37.051 2103	37.730 0788	38.424 2218	39.134 0045	39.859 8008
29	38.792 2345	39.531 8429	40.288 7668	41.063 4371	41.856 2958
30	40.568 0792	41.371 8946	42.195 2640	43.038 6937	43.902 7032
31	42.379 4408	43.251 0474	44.144 6575	45.060 8627	46.000 2707
32	44.227 0296	45.170 1321	46.137 9123	47.131 0582	48.150 2775
33	46.111 5702	47.129 9974	48.176 0153	49.250 4208	50.354 0344
34	48.033 8016	49.131 5099	50.259 9756	51.420 1183	52.612 8853
35	49.994 4776	51.175 5544	52.390 8251	53.641 3461	54.928 2074
36	51.994 3672	53.263 0350	54.569 6186	55.915 3281	57.301 4126
37	54.034 2545	55.394 8745	56.797 4351	58.243 3171	59.733 9479
38	56.114 9396	57.572 0156	59.075 3774	60.626 5959	62.227 2966
39	58.237 2384	59.795 4209	61.404 5733	63.066 4776	64.782 9791
40	60.401 9832	62.066 0736	63.786 1762	65.564 3064	67.402 5535
41	62.610 0228	64.384 9776	66.221 3652	68.121 4587	70.087 6174
42	64.862 2233	66.753 1584	68.711 3459	70.739 3433	72.839 8078
43	67.159 4678	69.171 6630	71.257 3512	73.419 4027	75.660 8030
44	69.502 6571	71.641 5609	73.860 6416	76.163 1135	78.552 3231
45	71.892 7103	74.163 9440	76.522 5060	78.971 9875	81.516 1312
46	74.330 5645	76.739 9278	79.244 2624	81.847 5722	84.554 0344
47	76.817 1758	79.370 6513	82.027 2583	84.791 4520	87.667 8853
48	79.353 5193	82.057 2777	84.872 8716	87.805 2490	90.859 5824
49	81.940 5897	84.800 9948	87.782 5113	90.890 6237	94.131 0720
50	84.579 4014	87.603 0160	90.757 6178	94.049 2760	97.484 3488
60	114.051 5394	119.116 0045	124.450 4349	130.070 2048	135.991 5900
70	149.977 9111	158.003 5281	166.539 6176	175.620 8000	185.284 1142
80	193.771 9578	205.991 3438	219.117 5688	233.222 2217	248.382 7126
90	247.156 6563	265.209 0632	284.798 1256	306.062 6266	329.154 2533
00	312.232 3059	338.284 6605	366.846 5021	398.173 6268	432.548 6540

Table 10. Amount of Annuity—(Continued)

AMOUNT OF 1 PER ANNUM. $A = \frac{(1+i)^n - 1}{i} = \frac{a-1}{i}$

n	3%	3½%	4%	4¼%	4½%
1	1.000 0000	1.000 0000	1.000 0000	1.000 0000	1.000 0000
2	2.030 0000	2.035 0000	2.040 0000	2.042 5000	2.045 0000
3	3.090 9000	3.106 2250	3.121 6000	3.129 3062	3.137 0250
4	4.183 6270	4.214 9429	4.246 4640	4.262 3018	4.278 1911
5	5.309 1358	5.362 4659	5.416 3226	5.443 4496	5.470 7097
6	6.468 4099	6.550 1522	6.632 9755	6.674 7962	6.716 8917
7	7.662 4622	7.779 4075	7.898 2945	7.958 4750	8.019 1518
8	8.892 3360	9.051 6868	9.214 2263	9.296 7102	9.380 0136
9	10.159 1061	10.368 4958	10.582 7953	10.691 8204	10.802 1142
10	11.463 8793	11.731 3932	12.006 1071	12.146 2228	12.288 2094
11	12.807 7957	13.141 9919	13.486 3514	13.662 4372	13.841 1788
12	14.192 0296	14.601 9616	15.025 8055	15.243 0908	15.464 0318
13	15.617 7904	16.113 0303	16.626 8377	16.890 9222	17.159 9133
14	17.086 3242	17.676 9864	18.291 9112	18.608 7864	18.932 1094
15	18.598 9139	19.295 6809	20.023 5876	20.399 6598	20.784 0543
16	20.156 8813	20.971 0297	21.824 5311	22.266 6453	22.719 3367
17	21.761 5877	22.705 0158	23.697 5124	24.212 9778	24.741 7069
18	23.414 4354	24.499 6913	25.645 4129	26.242 0293	26.855 0837
19	25.116 8684	26.357 1805	27.671 2294	28.357 3156	29.063 5625
20	26.870 3745	28.279 6818	29.778 0786	30.562 5015	31.371 4228
21	28.676 4857	30.269 4707	51.969 2017	32.861 4078	33.783 1368
22	30.536 7803	32.328 9022	34.247 9698	35.258 0176	36.303 3780
23	32.452 8837	34.460 4137	36.617 8886	37.756 4834	38.937 0300
24	34.426 4702	36.666 5282	39.082 6041	40.361 1339	41.689 1963
25	36.459 2643	38.949 8567	41.645 9083	43.076 4821	44.565 2102
26	38.553 0422	41.313 1017	44.311 7446	45.907 2326	47.570 6446
27	40.709 6335	43.759 0602	47.084 2144	48.858 2900	50.711 3236
28	42.930 9225	46.290 6273	49.967 5830	51.934 7673	53.993 3332
29	45.218 8502	48.910 7993	52.966 2863	55.141 9949	57.423 0332
30	47.575 4157	51.622 6773	56.084 9378	58.485 5297	61.007 0697
31	50.002 6782	54.429 4710	59.328 3353	61.971 1647	64.752 3878
32	52.502 7585	57.334 5025	62.701 4687	65.604 9392	68.666 2452
33	55.077 8413	60.341 2100	66.209 5274	69.393 1491	72.756 2263
34	57.730 1765	63.453 1524	69.857 9085	73.342 3580	77.030 2565
35	60.462 0818	66.674 0127	73.652 2249	77.459 4082	81.496 6180
36	63.275 9443	70.007 6032	77.598 3138	81.751 4330	86.163 9658
37	66.174 2226	73.457 8693	81.702 2464	86.225 8690	91.041 3443
38	69.159 4493	77.028 8947	85.970 3363	90.890 4684	96.138 2048
39	72.234 2328	80.724 9060	90.409 1497	95.753 3133	101.464 4240
40	75.401 2597	84.550 2778	95.025 5157	100.822 8291	107.030 3231
41	78.663 2975	88.509 5375	99.826 5363	106.107 7993	112.846 6876
42	82.023 1964	92.607 3713	104.819 5978	111.617 3808	118.924 7885
43	85.483 8923	96.848 6293	110.012 3817	117.361 1195	125.276 4040
44	89.048 4091	101.238 3313	115.412 8770	123.348 9671	131.913 8422
45	92.719 8614	105.781 6729	121.029 3920	129.591 2982	138.849 9651
46	96.501 4572	110.484 0314	126.870 5677	136.098 9283	146.098 2135
47	100.396 5010	115.350 9726	132.945 3904	142.883 1328	153.672 6331
48	104.408 3960	120.388 2566	139.263 2060	149.955 6659	161.587 9016
49	108.540 6478	125.601 8456	145.833 7343	157.328 7817	169.859 3572
50	112.796 8673	130.997 9102	152.667 0837	165.015 2550	178.503 0283
60	163.053 4368	196.516 8829	237.990 6852	262.344 7398	289.497 9540
70	230.594 0637	288.937 8646	364.290 4588	409.917 1129	461.869 6796
80	321.363 0186	419.306 7868	551.244 9768	633.668 4800	729.557 6985
90	443.348 9036	603.205 0270	827.983 3335	972.923 5402	1145.269 0066
100	607.287 7327	862.611 6567	1237.623 7046	1487.306 9707	1790.855 9563

Table 10. Amount of Annuity—(Continued)

AMOUNT OF 1 PER ANNUM. $A = \dfrac{(1+i)^n - 1}{i} = \dfrac{a-1}{i}$

n	4¾%	5%	6%	7%	8%
1	1.000 0000	1.000 0000	1.000 0000	1.000 0000	1.000 0000
2	2.047 5000	2.050 0000	2.060 0000	2.070 0000	2.080 0000
3	3.144 7562	3.152 5000	3.183 6000	3.214 9000	3.246 4000
4	4.294 1322	4.310 1250	4.374 6160	4.439 9430	4.506 1120
5	5.498 1034	5.525 6312	5.637 0930	5.750 7390	5.866 6010
6	6.759 2634	6.801 9128	6.975 3185	7.153 2907	7.335 9290
7	8.080 3284	8.142 0084	8.393 8376	8.654 0211	8.922 8034
8	9.464 1440	9.549 1089	9.897 4679	10.259 8026	10.636 6276
9	10.913 6908	11.026 5643	11.491 3160	11.977 9888	12.487 5578
10	12.432 0911	12.577 8925	13.180 7949	13.816 4480	14.486 5625
11	14.022 6154	14.206 7872	14.971 6426	15.783 5993	16.645 4875
12	15.688 6897	15.917 1265	16.869 9412	17.888 4513	18.977 1265
13	17.433 9024	17.712 9828	18.882 1377	20.140 6429	21.495 2966
14	19.262 0128	19.598 6320	21.015 0659	22.550 4879	24.214 9203
15	21.176 9584	21.578 5636	23.275 9699	25.129 0220	27.152 1139
16	23.182 8640	23.657 4918	25.672 5281	27.888 0536	30.324 2830
17	25.284 0500	25.840 3664	28.212 8798	30.840 2173	33.750 2257
18	27.485 0424	28.132 3847	30.905 6526	33.999 0325	37.450 2437
19	29.790 5819	30.539 0039	33.759 9917	37.378 9648	41.446 2632
20	32.205 6345	33.065 9541	36.785 5912	40.995 4923	45.761 9643
21	34.735 4022	35.719 2518	39.992 7267	44.865 1768	50.422 9214
22	37.385 3338	38.505 2144	43.392 2903	49.005 7392	55.456 7552
23	40.161 1371	41.430 4751	46.995 8277	53.436 1409	60.893 2956
24	43.068 7911	44.501 9989	50.815 5774	58.176 6708	66.764 7592
25	46.114 5587	47.727 0988	54.864 5120	63.249 0377	73.105 9400
26	49.305 0002	51.113 4538	59.156 3827	68.676 4704	79.954 4152
27	52.646 9877	54.669 1264	63.705 7657	74.483 8233	87.350 7684
28	56.147 7197	58.402 5828	68.528 1116	80.697 6909	95.338 8298
29	59.814 7363	62.322 7119	73.639 7983	87.346 5293	103.965 9362
30	63.655 9363	66.438 8475	79.058 1862	94.460 7863	113.283 2111
31	67.679 5933	70.760 7899	84.801 6774	102.073 0414	123.345 8680
32	71.894 3740	75.298 8294	90.889 7780	110.218 1543	134.213 5374
33	76.309 3567	80.063 7708	97.343 1647	118.933 4251	145.950 6204
34	80.934 0512	85.066 9594	104.183 7546	128.258 7648	158.626 6701
35	85.778 4186	90.320 3074	111.434 7799	138.236 8784	172.316 8037
36	90.852 8935	95.836 3227	119.120 8667	148.913 4598	187.102 1480
37	96.168 4059	101.628 1389	127.268 1187	160.337 4020	203.070 3198
38	101.736 4052	107.709 5458	135.904 2058	172.561 0202	220.315 9454
39	107.568 8845	114.095 0231	145.058 4581	185.640 2916	238.941 2210
40	113.678 4065	120.799 7742	154.761 9656	199.635 1120	259.056 5187
41	120.078 1308	127.839 7630	165.047 6836	214.609 5698	280.781 0402
42	126.781 8420	135.231 7511	175.950 5446	230.632 2397	304.243 5234
43	133.803 9795	142.993 3387	187.507 5772	247.776 4965	329.583 0053
44	141.159 6685	151.143 0056	199.758 0319	266.120 8512	356.949 6457
45	148.864 7528	159.700 1559	212.743 5138	285.749 3108	386.505 6174
46	156.935 8285	168.685 1637	226.508 1246	306.751 7626	418.426 0668
47	165.390 2804	178.119 4218	241.098 6121	329.224 3860	452.900 1521
48	174.246 3187	188.025 3929	256.564 5288	353.270 0930	490.132 1643
49	183.523 0188	198.426 6626	272.958 4006	378.998 9995	530.342 7374
50	193.240 3622	209.347 9957	290.335 9046	406.528 9295	573.770 1564
60	319.785 5885	353.583 7179	533.128 1809	813.520 3834	1253.213 2958
70	521.058 8495	588.528 5107	967.932 1696	1614.134 1742	2720.080 0738
80	841.188 8678	971.228 8213	1746.599 8914	3189.062 6797	5886.935 4283
90	1350.363 4500	1594.607 3010	3141.075 1872	6287.185 4268	12723.938 6160
00	2160.218 0106	2610.025 1569	5638.368 0586	12381.661 7938	27484.515 7043

Table 11. Present Value of Annuity

PRESENT VALUE OF 1 PER ANNUM. $P.V.A. = \frac{1 - \frac{1}{(1+i)^n}}{i} = \frac{D}{i}$

n	½%	1%	1¼%	1½%	1¾%
1	.995 0249	.990 0990	.987 6543	.985 2217	.982 8010
2	1.985 0994	1.970 3951	1.963 1154	1.955 8834	1.948 6988
3	2.970 2481	2.940 9852	2.926 5337	2.912 2004	2.897 9840
4	3.950 4957	3.901 9656	3.878 0580	3.854 3846	3.830 9425
5	4.925 8663	4.853 4312	4.817 8350	4.782 6450	4.747 8551
6	5.896 3844	5.795 4765	5.746 0099	5.697 1872	4.648 9976
7	6.862 0740	6.728 1945	6.662 7258	6.598 2140	6.534 6414
8	7.822 9592	7.651 6778	7.568 1243	7.485 9251	7.405 0530
9	8.779 0639	8.566 0176	8.462 3450	8.360 5173	8.260 4943
10	9.730 4119	9.471 3045	9.345 5259	9.222 1846	9.101 2229
11	10.677 0267	10.367 6282	10.217 8034	10.071 1178	9.927 4918
12	11.618 9321	11.255 0775	11.079 3120	10.907 5052	10.739 5497
13	12.556 1513	12.133 7401	11.930 1847	11.731 5322	11.537 6410
14	13.488 7078	13.003 7030	12.770 5528	12.543 3815	12.322 0059
15	14.416 6246	13.865 0525	13.600 5459	13.343 2330	13.092 8805
16	15.339 9250	14.717 8738	14.420 2923	14.131 2640	13.850 4968
17	16.258 6319	15.562 2513	15.229 9183	14.907 6493	14.595 0828
18	17.172 7680	16.398 2686	16.029 5489	15.672 5609	15.326 8627
19	18.082 3562	17.226 0085	16.819 3076	16.426 1684	16.046 0567
20	18.987 4192	18.045 5530	17.599 3161	17.168 6388	16.752 8813
21	19.887 9792	18.856 9831	18.369 6950	17.900 1367	17.447 5492
22	20.784 0590	19.660 3793	19.130 5629	18.620 8244	18.130 2695
23	21.675 6806	20.455 8211	19.882 0374	19.330 8614	18.801 2476
24	22.562 8662	21.243 3873	20.624 2345	20.030 4054	19.460 6856
25	23.445 6380	22.023 1557	21.357 2686	20.719 6112	20.108 7820
26	24.324 0179	22.795 2037	22.081 2530	21.398 6317	20.745 7317
27	25.198 0278	23.559 6076	22.796 2992	22.067 6175	21.371 7264
28	26.067 6894	24.316 4432	23.502 5178	22.726 7167	21.986 9547
29	26.933 0242	25.065 7853	24.200 0176	23.376 0756	22.591 6017
30	27.794 0540	25.807 7082	24.888 9062	24.015 8380	23.185 8493
31	28.650 8000	26.542 2854	25.569 2901	24.646 1458	23.769 8765
32	29.503 2836	27.269 5895	26.241 2742	25.267 1387	24.343 8590
33	30.351 5259	27.989 6926	26.904 9622	25.878 9544	24.907 9695
34	31.195 5482	28.702 6659	27.560 4564	26.481 7285	25.462 3779
35	32.035 3713	29.408 5801	28.207 8582	27.075 5946	26.007 2510
36	32.871 0162	30.107 5050	28.847 2674	27.660 6843	26.542 7528
37	33.702 5037	30.799 5099	29.478 7826	28.237 1274	27.069 0446
38	34.529 8544	31.484 6633	30.102 5013	28.805 0516	27.586 2846
39	35.353 0890	32.163 0330	30.718 5198	29.364 5829	28.094 6286
40	36.172 2279	32.834 6861	31.326 9332	29.915 8452	28.594 2296
41	36.987 2914	33.499 6892	31.927 8352	30.458 9608	29.085 2379
42	37.798 2999	34.158 1081	32.521 3187	30.994 0500	29.567 8014
43	38.605 2735	34.810 0081	33.107 4753	31.521 2316	30.042 0652
44	39.408 2324	35.455 4535	33.686 3954	32.040 6222	30.508 1722
45	40.207 1964	36.094 5084	34.258 1682	32.552 3372	30.966 2626
46	41.002 1855	36.727 2361	34.822 8822	33.056 4898	31.416 4743
47	41.793 2194	37.353 6991	35.380 6244	33.553 1920	31.858 9428
48	42.580 3178	37.973 9595	35.931 4809	34.042 5536	32.293 8013
49	43.363 5003	38.588 0787	36.475 5367	34.524 6834	32.721 1806
50	44.142 7864	39.196 1175	37.012 8757	34.999 6881	33.141 2095
60	51.725 5608	44.955 0384	42.034 5918	39.380 2689	36.963 9855
70	58.939 4176	50.168 5144	46.469 6756	43.154 8718	40.177 9027
80	65.802 3054	54.888 2061	50.386 6571	46.407 3235	42.879 9347
90	72.331 2996	59.160 8815	53.846 0604	49.209 8545	45.151 6104
100	78.542 6448	63.028 8788	56.901 3394	51.624 7037	47.061 4730

Table 11. Present Value of Annuity—(Continued)

PRESENT VALUE OF 1 PER ANNUM. $P.V.A. = \frac{1 - \frac{1}{(1+i)^n}}{i} = \frac{D}{i}$

n	2%	2⅛%	2¼%	2⅜%	2½%
1	.980 3922	.979 1922	.977 9951	.976 8010	.975 6098
2	1.941 5609	1.938 0095	1.934 4696	1.930 9411	1.927 4242
3	2.883 8833	2.876 8758	2.869 8969	2.862 9462	2.856 0236
4	3.807 7287	3.796 2065	3.784 7402	3.773 3296	3.761 9742
5	4.713 4595	4.696 4078	4.679 4525	4.662 5930	4.645 8285
6	5.601 4309	5.577 8779	5.554 4768	5.531 2264	5.508 1254
7	6.471 9911	6.441 0065	6.410 2463	6.379 7083	6.349 3906
8	7.325 4814	7.286 1753	7.247 1846	7.208 5063	7.170 1372
9	8.162 2367	8.113 7579	8.065 7062	8.018 0769	7.970 8655
10	8.982 5850	8.924 1204	8.866 2164	8.808 8664	8.752 0639
11	9.786 8480	9.717 6209	9.649 1113	9.581 3102	9.514 2087
12	10.575 3412	10.494 6104	10.414 7788	10.335 8342	10.257 7646
13	11.348 3738	11.255 4325	11.163 5979	11.072 8539	10.983 1850
14	12.106 2488	12.000 4235	11.895 9392	11.792 7755	11.690 9122
15	12.849 2635	12.729 9129	12.612 1655	12.495 9956	12.381 3777
16	13.577 7093	13.444 2231	13.312 6313	13.182 9017	13.055 0027
17	14.291 8719	14.143 6701	13.997 6834	13.853 8722	13.712 1977
18	14.992 0312	14.828 5632	14.667 6611	14.509 2769	14.353 3636
19	15.678 4620	15.499 2051	15.322 8959	15.149 4768	14.978 8913
20	16.351 4333	16.155 8923	15.963 7124	15.774 8247	15.589 1623
21	17.011 2092	16.798 9154	16.590 4278	16.385 6652	16.184 5486
22	17.658 0482	17.428 5585	17.203 3523	16.982 3347	16.765 4132
23	18.292 2041	18.045 1002	17.802 7896	17.565 1621	17.332 1105
24	18.913 9256	18.648 8129	18.389 0362	18.134 4685	17.884 9858
25	19.523 4565	19.239 9636	18.962 3826	18.690 5675	18.424 3764
26	20.121 0358	19.818 8138	19.523 1126	19.233 7656	18.950 6111
27	20.706 8978	20.385 6194	20.071 5038	19.764 3620	19.464 0109
28	21.281 2724	20.940 6310	20.607 8276	20.282 6491	19.964 8887
29	21.844 3847	21.484 0940	21.132 3498	20.788 9124	20.453 5499
30	22.396 4556	22.016 2487	21.645 3298	21.283 4309	20.930 2926
31	22.937 7015	22.537 3305	22.147 0219	21.766 4771	21.395 4074
32	23.468 3348	23.047 5696	22.637 6742	22.238 3171	21.849 1780
33	23.988 5636	23.547 1918	23.117 5298	22.699 2108	22.291 8809
34	24.498 5917	24.036 4179	23.586 8262	23.149 4123	22.723 7863
35	24.998 6193	24.515 4643	24.045 7958	23.589 1695	23.145 1573
36	25.488 8425	24.984 5428	24.494 6658	24.018 7248	23.556 2511
37	25.969 4534	25.443 8607	24.933 6585	24.438 3148	23.957 3181
38	26.440 6406	25.893 6213	25.362 9912	24.848 1707	24.348 6030
39	26.902 5888	26.334 0233	25.782 8765	25.248 5184	24.730 3444
40	27.354 3792	26.765 2615	26.193 5222	25.639 5784	25.102 7750
41	27.799 4894	27.187 5265	26.595 1317	26.021 5662	25.466 1220
42	28.234 7936	27.601 0052	26.987 9039	26.394 6923	25.820 6068
43	28.661 5623	28.005 8802	27.372 0332	26.759 1622	26.166 4457
44	29.079 9631	28.402 3307	27.747 7097	27.115 1768	26.503 8494
45	29.490 1599	28.790 5319	28.115 1195	27.462 9321	26.833 0239
46	29.892 3136	29.170 6555	28.474 4445	27.802 6199	27.154 1696
47	30.286 5820	29.542 8695	28.825 8626	28.134 4272	27.467 4826
48	30.673 1196	29.907 3385	29.169 5478	28.458 5370	27.773 1537
49	31.052 0780	30.264 2238	29.505 6702	28.775 1277	28.071 3695
50	31.423 6059	30.613 6830	29.834 3963	29.084 3738	28.362 3117
50	34.760 8867	33.732 2993	32.748 9528	31.808 4816	30.908 6565
70	37.498 6193	36.259 5088	35.082 0849	33.962 6772	32.897 8570
80	39.744 5136	38.307 4645	36.949 7808	35.666 1923	34.451 8172
90	41.586 9292	39.967 0508	38.444 8902	37.013 3140	35.665 7685
00	43.098 3516	41.311 9173	39.641 7405	38.078 6036	36.614 1053

Table 11. Present Value of Annuity—(Continued)

PRESENT VALUE OF 1 PER ANNUM. $P.V.A. = \dfrac{1 - \dfrac{1}{(1+i)^n}}{i} = \dfrac{D}{i}$

n	3%	3½%	4%	4¼%	4½%
1	.970 8738	.966 1836	.961 5385	.959 2326	.956 9378
2	1.913 4697	1.899 6943	1.886 0947	1.879 3598	1.872 6678
3	2.828 6114	2.801 6370	2.775 0910	2.761 9758	2.748 9644
4	3.717 0984	3.673 0792	3.629 8952	3.608 6099	3.587 5257
5	4.579 7072	4.515 0524	4.451 8223	4.420 7290	4.389 9767
6	5.417 1914	5.328 5530	5.242 1369	5.199 7400	5.157 8725
7	6.230 2830	6.114 5440	6.002 0547	5.946 9928	5.892 7009
8	7.019 6922	6.873 9555	6.732 7449	6.663 7821	6.595 8861
9	7.786 1089	7.607 6865	7.435 3316	7.351 3497	7.268 7905
10	8.530 2028	8.316 6053	8.110 8958	8.010 8870	7.912 7182
11	9.252 624	9.001 5510	8.760 4767	8.643 5367	8.528 9169
12	9.954 0040	9.663 3343	9.385 0738	9.250 3949	9.118 5808
13	10.634 9553	10.302 7385	9.985 6478	9.832 5131	9.682 8524
14	11.296 0731	10.920 5203	10.563 1229	10.390 8999	10.222 8253
15	11.937 9351	11.517 4109	11.118 3874	10.926 5226	10.739 5457
16	12.561 1020	12.094 1168	11.652 2956	11.440 3095	11.234 0150
17	13.166 1185	12.651 3206	12.165 6688	11.933 1506	11.707 1914
18	13.753 5131	13.189 6817	12.659 2970	12.405 8998	12.159 9918
19	14.323 7991	13.709 8374	13.133 9394	12.859 3764	12.593 2936
20	14.877 4749	14.212 4033	13.590 3263	13.294 3658	13.007 9364
21	15.415 0241	14.697 9742	14.029 1600	13.711 6219	13.404 7239
22	15.936 9166	15.167 1248	14.451 1153	14.111 8675	13.784 4248
23	16.443 6084	15.620 4105	14.856 8417	14.495 7962	14.147 7749
24	16.935 5421	16.058 3676	15.246 9631	14.864 0731	14.495 4784
25	17.413 1477	16.481 5146	15.622 0799	15.217 3363	14.828 2090
26	17.876 8424	16.890 3523	15.982 7692	15.556 1979	15.146 6114
27	18.327 0315	17.285 3645	16.329 5858	15.881 2450	15.451 3028
28	18.764 1082	17.667 0188	16.663 0632	16.193 0407	15.742 8735
29	19.188 4546	18.035 7670	16.983 7146	16.492 1254	16.021 8885
30	19.600 4414	18.392 0454	17.292 0333	16.779 0172	16.288 8885
31	20.000 4285	18.736 2758	17.588 4936	17.054 2131	16.544 3910
32	20.388 7655	19.068 8655	17.873 5515	17.318 1900	16.788 8909
33	20.765 7918	19.390 2082	18.147 6457	17.571 4053	17.022 8621
34	21.131 8367	19.700 6842	18.411 1978	17.814 2977	17.246 7580
35	21.487 2201	20.000 6611	18.664 6132	18.047 2879	17.461 0124
36	21.832 2525	20.290 4938	18.908 2820	18.270 7798	17.666 0406
37	22.167 2354	20.570 5254	19.142 5788	18.485 1605	17.862 2398
38	22.492 4616	20.841 0874	19.367 8642	18.690 8014	18.049 9902
39	22.808 2151	21.102 4999	19.584 4848	18.888 0589	18.229 6557
40	23.114 7720	21.355 0723	19.792 7739	19.077 2747	18.401 5844
41	23.412 4000	21.599 1037	19.993 0518	19.258 7767	18.566 1095
42	23.701 3592	21.834 8828	20.185 6267	19.432 8793	18.723 5498
43	23.981 9021	22.062 6887	20.370 7949	19.599 8843	18.874 2103
44	24.254 2739	22.282 7910	20.548 8413	19.760 0808	19.018 3830
45	24.518 7125	22.495 4503	20.720 0397	19.913 7466	19.156 3474
46	24.775 4491	22.700 9181	20.884 6536	20.061 1478	19.288 3707
47	25.024 7078	22.899 4378	21.042 9361	20.202 5399	19.414 7088
48	25.266 7066	23.091 2442	21.195 1309	20.338 1677	19.535 6065
49	25.501 6569	23.276 5645	21.341 4720	20.468 2664	19.651 2981
50	25.729 7640	23.455 6179	21.482 1846	20.593 0613	19.762 0078
60	27.675 5637	24.944 7341	22.623 4900	21.592 7791	20.638 0220
70	29.123 4214	26.000 3966	23.394 5150	22.252 1303	21.202 1119
80	30.200 7634	26.748 7757	23.915 3918	22.686 9970	21.565 3449
90	31.002 4071	27.279 3156	24.267 2776	22.973 8078	21.799 2408
100	31.598 9053	27.655 4254	24.504 9990	23.162 9702	21.949 8527

Table 11. Present Value of Annuity—(Continued)

PRESENT VALUE OF 1 PER ANNUM. $P.V.A. = 1 - \frac{1}{(1+i)^n} = \frac{D}{i}$.

n	4¾%	5%	6%	7%	8%
1	.954 6539	.952 3810	.943 3962	.934 5794	.925 9259
2	1.866 0181	1.859 4104	1.833 3927	1.808 0182	1.783 2648
3	2.736 0554	2.723 2480	2.673 0120	2.624 3160	2.577 0970
4	3.566 6400	3.545 9505	3.465 1056	3.387 2113	3.312 1268
5	4.359 5609	4.329 4767	4.212 3638	4.100 1974	3.992 7100
6	5.116 5259	5.075 6921	4.917 3243	4.766 5397	4.622 8797
7	5.839 1656	5.786 3734	5.582 3814	5.389 2894	5.206 3701
8	6.529 0363	6.463 2128	6.209 7938	5.971 2985	5.746 6389
9	7.187 6242	7.107 8217	6.801 6923	6.515 2322	6.246 8879
10	7.816 3477	7.721 7349	7.360 0870	7.023 5816	6.710 0814
11	8.416 5610	8.306 4142	7.886 8746	7.498 6744	7.138 9643
12	8.989 5571	8.863 2516	8.383 8439	7.942 6863	7.536 0780
13	9.536 5700	9.393 5730	8.852 6830	8.357 6508	7.903 7759
14	10.058 7780	9.898 6409	9.294 9839	8.745 4680	8.244 2370
15	10.557 3060	10.379 6580	9.712 2490	9.107 9140	8.559 4787
16	11.033 2277	10.837 7696	10.105 8953	9.446 6486	8.851 3692
17	11.487 5682	11.274 0662	10.477 2597	9.763 2230	9.121 6381
18	11.921 3062	11.689 5869	10.827 6035	10.059 0869	9.371 8871
19	12.335 3758	12.085 3209	11.158 1165	10.335 5952	9.603 5992
20	12.730 6690	12.462 2103	11.469 9212	10.594 0143	9.818 1474
21	13.108 0372	12.821 1527	11.764 0766	10.835 5273	10.016 8032
22	13.468 2933	13.163 0026	12.041 5817	11.061 2405	10.200 7437
23	13.812 2132	13.488 5739	12.303 3790	11.272 1874	10.371 0590
24	14.140 5376	13.798 6418	12.550 3575	11.469 3340	10.528 7583
25	14.453 9739	14.093 9446	12.783 3562	11.653 5832	10.674 7762
26	14.753 1970	14.375 1853	13.003 1662	11.825 7787	10.809 9780
27	15.038 8516	14.643 0336	13.210 5341	11.986 7090	10.935 1648
28	15.311 5528	14.898 1273	13.406 1643	12.137 1113	11.051 0785
29	15.571 8881	15.141 0736	13.590 7210	12.277 6741	11.158 4060
30	15.820 4183	15.372 4510	13.764 8312	12.409 0412	11.257 7833
31	16.057 6785	15.592 8105	13.929 0860	12.531 8142	11.349 7994
32	16.284 1800	15.802 6767	14.084 0434	12.646 5553	11.434 9994
33	16.500 4105	16.002 5492	14.230 2296	12.753 7900	11.513 8884
34	16.706 8358	16.192 9040	14.368 1411	12.854 0094	11.586 9337
35	16.903 9005	16.374 1943	14.498 2446	12.947 6723	11.654 5682
36	17.092 0291	16.546 8517	14.620 9871	13.035 2078	11.717 1928
37	17.271 6269	16.711 2873	14.736 7803	13.117 0166	11.775 1785
38	17.443 0805	16.867 8927	14.846 0192	13.193 4735	11.828 8690
39	17.606 7593	17.017 0407	14.949 0747	13.264 9285	11.878 5824
40	17.763 0162	17.159 0864	15.046 2969	13.331 7088	11.924 6133
41	17.912 1873	17.294 3680	15.138 0159	13.394 1204	11.967 2346
42	18.054 5941	17.423 2076	15.224 5433	13.452 4490	12.006 6987
43	18.190 5433	17.545 9120	15.306 1729	13.506 9617	12.043 2395
44	18.320 3277	17.662 7733	15.383 1820	13.557 9081	12.077 0736
45	18.444 2269	17.774 0698	15.455 8321	13.605 5216	12.108 4015
46	18.562 5078	17.880 0665	15.524 3699	13.650 0202	12.137 4088
47	18.675 4251	17.981 0157	15.589 0282	13.691 6076	12.164 2674
48	18.783 2221	18.077 1578	15.650 0266	13.730 4744	12.189 1365
49	18.886 1308	18.168 7217	15.707 5723	13.766 7986	12.212 1634
50	18.984 3731	18.255 9255	15.761 8606	13.800 7463	12.233 4846
60	19.752 2689	18.929 2895	16.161 4277	14.039 1812	12.376 5518
70	20.235 0630	19.342 6766	16.384 5439	14.160 3893	12.442 8196
80	20.538 6070	19.596 4605	16.509 1308	14.222 0054	12.473 5144
90	20.729 4523	19.752 2617	16.578 6994	14.253 3279	12.487 7320
00	20.849 4412	19.847 9102	16.617 5462	14.269 2507	12.494 3176

PRESENT VALUE OF AN ANNUITY.—The present value of an annuity is that sum which if placed at interest compounded periodically will permit the payment or receipt of a fixed sum at uniform intervals of time.

The **formula** for obtaining this value is:

$$\text{Present value of an annuity } (P.\ V.\ A.) = \frac{1 - \frac{1}{(1+i)^n}}{i} = \frac{D}{i}$$

where $\frac{1}{(1+i)^n}$ = present value of one

D = compound discount

In other words, the present worth of an annuity is equal to the compound discount divided by the simple interest for one period. To facilitate solving problems of this nature Table 11 has been devised and its use is illustrated in the following example.

Example: A corporation owning a patent with an eight year life, receives a quarterly royalty in the amount of $5,500. At what value shall it set up this asset upon its balance sheet assuming that money is worth 5% per annum?

Table 11 shows the present value of an annuity of $1 at 1¼% for 32 periods as 26.2412742.

$$\$5{,}500 \times 26.2412742 = \$144{,}327.01,$$

which is the required value of the asset.

AN ANNUITY WHICH $1 WILL BUY.—The annuity which $1 will buy is equivalent to an annuity whose present worth is $1.

Example: A man at the age of 40 falls heir to $50,000. He invests this money at an effective rate of 4% per annum. What is the annuity he may expect to receive for the next 30 years beginning 1 year hence?

The formula in this instance is

$$A_1 = \frac{1}{A} + i$$

where A is the amount of the annuity and i, as heretofore, is the simple interest per period expressed decimally. Using Table 12, for 30 periods the factor at 4% is .0578301, which multiplied by $50,000, gives an annual instalment of $2,891.50.

Table 12. Annuity 1 Will Buy

ANNUITY WHICH 1 WILL BUY. $A_1 = \frac{1}{A} + i$

n	½%	1%	1¼%	1½%	1¾%
1	1.005 0000	1.010 0000	1.012 5000	1.015 0000	1.017 5000
2	.503 7531	.507 5124	.509 3944	.511 2779	.513 1630
3	.336 6722	.340 0221	.341 7012	.343 3830	.345 0675
4	.253 1328	.256 2811	.257 8610	.259 4448	.261 0324
5	.203 0100	.206 0398	.207 5621	.209 0893	.210 6214
6	.169 5955	.172 5484	.174 0338	.175 5252	.177 0226
7	.145 7285	.148 6283	.150 0887	.151 5562	.153 0306
8	.127 8289	.130 6903	.132 1331	.133 5840	.135 0429
9	.113 9074	.116 7404	.118 1706	.119 6098	.121 0581
10	.102 7706	.105 5821	.107 0031	.108 4342	.109 8754
11	.093 6590	.096 4541	.097 8684	.099 2938	.100 7304
12	.086 0664	.088 8488	.090 2583	.091 6800	.093 1138
13	.079 6422	.082 4148	.083 8210	.085 2404	.086 6728
14	.074 1361	.076 9012	.078 3052	.079 7233	.081 1556
15	.069 3644	.072 1238	.073 5265	.074 9444	.076 3774
16	.065 1894	.067 9446	.069 3467	.070 7651	.072 1996
17	.061 5058	.064 2581	.065 6602	.067 0796	.068 5162
18	.058 2317	.060 9820	.062 3848	.063 8058	.065 2449
19	.055 3025	.058 0518	.059 4555	.060 8785	.062 3206
20	.052 6664	.055 4153	.056 8204	.058 2457	.059 6912
21	.050 2816	.053 0308	.054 4375	.055 8655	.057 3146
22	.048 1138	.050 8637	.052 2724	.053 7033	.055 1564
23	.046 1346	.048 8858	.050 2967	.051 7308	.053 1880
24	.044 3206	.047 0735	.048 4866	.049 9241	.051 3856
25	.042 6519	.045 4068	.046 8225	.048 2634	.049 7295
26	.041 1116	.043 8689	.045 2873	.046 7320	.048 2021
27	.039 6856	.042 4455	.043 8668	.045 3153	.046 7908
28	.038 3617	.041 1244	.042 5486	.044 0011	.045 4815
29	.037 1291	.039 8950	.041 3223	.042 7788	.044 2642
30	.035 9789	.038 7481	.040 1785	.041 6392	.043 1298
31	.034 9030	.037 6757	.039 1094	.040 5743	.042 0700
32	.033 8945	.036 6709	.038 1079	.039 5771	.041 0781
33	.032 9473	.035 7274	.037 1679	.038 6414	.040 1478
34	.032 0559	.034 8400	.036 2839	.037 7619	.039 2736
35	.031 2155	.034 0037	.035 4511	.036 9336	.038 4508
36	.030 4219	.033 2143	.034 6653	.036 1524	.037 6751
37	.029 6714	.032 4680	.033 9227	.035 4144	.036 9426
38	.028 9604	.031 7615	.033 2198	.034 7161	.036 2499
39	.028 2861	.031 0916	.032 5536	.034 0546	.035 5940
40	.027 6455	.030 4556	.031 9214	.033 4271	.034 9721
41	.027 0363	.029 8510	.031 3206	.032 8311	.034 3817
42	.026 4562	.029 2756	.030 7491	.032 2643	.033 8206
43	.025 9032	.028 7274	.030 2047	.031 7246	.033 2867
44	.025 3754	.028 2044	.029 6856	.031 2104	.032 7781
45	.024 8712	.027 7050	.029 1901	.030 7198	.032 2932
46	.024 3889	.027 2278	.028 7168	.030 2512	.031 8304
47	.023 9273	.026 7711	.028 2641	.029 8034	.031 3884
48	.023 4850	.026 3338	.027 8307	.029 3750	.030 9657
49	.023 0609	.025 9147	.027 4156	.028 9648	.030 5612
50	.022 6538	.025 5127	.027 0176	.028 5717	.030 1739
60	.019 3328	.022 2444	.023 7899	.025 3934	.027 0534
70	.016 9666	.019 9328	.021 5194	.023 1724	.024 8893
80	.015 1970	.018 2188	.019 8465	.021 5483	.023 3209
90	.013 8253	.016 9031	.018 5715	.020 3211	.022 1476
00	.012 7319	.015 8657	.017 5743	.019 3706	.021 2488

Table 12. Annuity 1 Will Buy—(Continued)

ANNUITY WHICH 1 WILL BUY. $A_1 = \frac{1}{A} + i$

n	2%	2⅛%	2¼%	2⅜%	2½%
1	1.020 0000	1.021 2500	1.022 5000	1.023 7500	1.025 0000
2	.515 0495	.515 9934	.516 9376	.517 8822	.518 8272
3	.346 7547	.347 5993	.348 4446	.349 2905	.350 1372
4	.262 6238	.263 4209	.264 2189	.265 0179	.265 8179
5	.212 1584	.212 9287	.213 7002	.214 4729	.215 2469
6	.178 5258	.179 2796	.180 0350	.180 7917	.181 5500
7	.154 5120	.155 2552	.156 0002	.156 7470	.157 4954
8	.136 5098	.137 2462	.137 9846	.138 7250	.139 4674
9	.122 5154	.123 2474	.123 9817	.124 7182	.125 4569
10	.111 3265	.112 0559	.112 7877	.113 5220	.114 2588
11	.102 1779	.102 9058	.103 6365	.104 3699	.105 1060
12	.094 5596	.095 2870	.096 0174	.096 7508	.097 4871
13	.088 1184	.088 8460	.089 5769	.090 3110	.091 0483
14	.082 6020	.083 3304	.084 0623	.084 7977	.085 5365
15	.077 8255	.078 5551	.079 2885	.080 0256	.080 7665
16	.073 6501	.074 3814	.075 1166	.075 8558	.076 5990
17	.069 9698	.070 7030	.071 4404	.072 1820	.072 9278
18	.066 7021	.067 4374	.068 1772	.068 9214	.069 6701
19	.063 7818	.064 5194	.065 2618	.066 0089	.066 7606
20	.061 1567	.061 8969	.062 6421	.063 3922	.064 1471
21	.058 7848	.059 5277	.060 2757	.061 0290	.061 7873
22	.056 6314	.057 3771	.058 1282	.058 8847	.059 6466
23	.054 6681	.055 4167	.056 1710	.056 9309	.057 6964
24	.052 8711	.053 6227	.054 3802	.055 1436	.055 9128
25	.051 2204	.051 9752	.052 7360	.053 5029	.054 2759
26	.049 6992	.050 4571	.051 2213	.051 9919	.052 7688
27	.048 2931	.049 0542	.049 8219	.050 5961	.051 3769
28	.046 9897	.047 7540	.048 5253	.049 3032	.050 0879
29	.045 7784	.046 5461	.047 3208	.048 1026	.048 8913
30	.044 6499	.045 4210	.046 1993	.046 9849	.047 7776
31	.043 5964	.044 3708	.045 1528	.045 9422	.046 7390
32	.042 6106	.043 3885	.044 1742	.044 9674	.045 7683
33	.041 6865	.042 4679	.043 2572	.044 0544	.044 8594
34	.040 8187	.041 6035	.042 3966	.043 1976	.044 0068
35	.040 0022	.040 7906	.041 5873	.042 3923	.043 2056
36	.039 2328	.040 0248	.040 8252	.041 6342	.042 4516
37	.038 5068	.039 3022	.040 1064	.040 9194	.041 7409
38	.037 8206	.038 6196	.039 4275	.040 2444	.041 0701
39	.037 1711	.037 9737	.038 7854	.039 6063	.040 4362
40	.036 5558	.037 3619	.038 1774	.039 0022	.039 8362
41	.035 9719	.036 7816	.037 6009	.038 4297	.039 2679
42	.035 4173	.036 2306	.037 0536	.037 8864	.038 7288
43	.034 8899	.035 7068	.036 5336	.037 3704	.038 2169
44	.034 3879	.035 2084	.036 0390	.036 8797	.037 7304
45	.033 9096	.034 7336	.035 5680	.036 4127	.037 2675
46	.033 4534	.034 2810	.035 1192	.035 9678	.036 8268
47	.033 0179	.033 8491	.034 6911	.035 5436	.036 4067
48	.032 6018	.033 4366	.034 2823	.035 1388	.036 0060
49	.032 2040	.033 0423	.033 8918	.034 7522	.035 6235
50	.031 8232	.032 6651	.033 5184	.034 3827	.035 2581
60	.028 7680	.029 6452	.030 5353	.031 4382	.032 3534
70	.026 6676	.027 5790	.028 5046	.029 4441	.030 3971
80	.025 1607	.026 1046	.027 0638	.028 0378	.029 0260
90	.024 0460	.025 0206	.026 0113	.027 0173	.028 0381
100	.023 2027	.024 2061	.025 2259	.026 2615	.027 3119

Table 12. Annuity 1 Will Buy—(Continued)

Annuity Which 1 Will Buy. $A_1 = \frac{1}{A} + i$

n	3%	3½%	4%	4¼%	4½%
1	1.030 0000	1.035 0000	1.040 0000	1.042 5000	1.045 0000
2	.522 6108	.526 4005	.530 1961	.532 0961	.533 9976
3	.353 5304	.356 9342	.360 3485	.362 0596	.363 7784
4	.269 0270	.272 2511	.275 4900	.277 1150	.278 7436
5	.218 3546	.221 4814	.224 6271	.226 2070	.227 7916
6	.184 5975	.187 6682	.190 7619	.192 3173	.193 8784
7	.160 5064	.163 5445	.166 6096	.168 1522	.169 7015
8	.142 4564	.145 4766	.148 5278	.150 0649	.151 6096
9	.128 4339	.131 4460	.134 4930	.136 0294	.137 5745
10	.117 2305	.120 2414	.123 2909	.124 8301	.126 3788
11	.108 0774	.111 0920	.114 1490	.115 6934	.117 2482
12	.100 4621	.103 4840	.106 5522	.108 1035	.109 6662
13	.094 0295	.097 0616	.100 1437	.101 7034	.103 2754
14	.088 5263	.091 5707	.094 6690	.096 2381	.097 8203
15	.083 7666	.086 8251	.089 9411	.091 5204	.093 1138
16	.079 6108	.082 6848	.085 8200	.087 4102	.089 0154
17	.075 9525	.079 0431	.082 1985	.083 8002	.085 4176
18	.072 7087	.075 8168	.078 9933	.080 6068	.082 2369
19	.069 8139	.072 9403	.076 1386	.077 7643	.079 4073
20	.067 2157	.070 3611	.073 5818	.075 2198	.076 8761
21	.064 8718	.068 0366	.071 2801	.072 9308	.074 6006
22	.062 7474	.065 9321	.069 1988	.070 8623	.072 5456
23	.060 8139	.064 0188	.067 3091	.068 9855	.070 6825
24	.059 0474	.062 2728	.065 5868	.067 2763	.068 9870
25	.057 4279	.060 6740	.064 0120	.065 7145	.067 4390
26	.055 9383	.059 2054	.062 5674	.064 2831	.066 0214
27	.054 5642	.057 8524	.061 2385	.062 9674	.064 7195
28	.053 2932	.056 6026	.060 0130	.061 7549	.063 5208
29	.052 1147	.055 4454	.058 8799	.060 6350	.062 4146
30	.051 0193	.054 3713	.057 8301	.059 5982	.061 3915
31	.049 9989	.053 3724	.056 8554	.058 6365	.060 4434
32	.049 0466	.052 4415	.055 9486	.057 7428	.059 5632
33	.048 1561	.051 5724	.055 1036	.056 9106	.058 7445
34	.047 3220	.050 7597	.054 3148	.056 1347	.057 9819
35	.046 5393	.049 9984	.053 5773	.055 4100	.057 2704
36	.045 8038	.049 2842	.052 8869	.054 7322	.056 6058
37	.045 1116	.048 6132	.052 2396	.054 0974	.055 9840
38	.044 4593	.047 9821	.051 6319	.053 5023	.055 4017
39	.043 8438	.047 3878	.051 0608	.052 9435	.054 8557
40	.043 2624	.046 8273	.050 5235	.052 4184	.054 3432
41	.042 7124	.046 2982	.050 0174	.051 9244	.053 8616
42	.042 1917	.045 7983	.049 5402	.051 4592	.053 4087
43	.041 6981	.045 3254	.049 0899	.051 0207	.052 9824
44	.041 2298	.044 8777	.048 6645	.050 6071	.052 5807
45	.040 7852	.044 4534	.048 2625	.050 2166	.052 2020
46	.040 3625	.044 0511	.047 8820	.049 8476	.051 8447
47	.039 9605	.043 6692	.047 5219	.049 4987	.051 5073
48	.039 5778	.043 3065	.047 1806	.049 1686	.051 1886
49	.039 2131	.042 9617	.046 8571	.048 8561	.050 8872
50	.038 8655	.042 6337	.046 5502	.048 5600	.050 6022
60	.036 1330	.040 0886	.044 2018	.046 3118	.048 4543
70	.034 3366	.038 4610	.042 7451	.044 9395	.047 1651
80	.033 1118	.037 3849	.041 8141	.044 0781	.046 3707
90	.032 2556	.036 6578	.041 2078	.043 5278	.045 8732
100	.031 6467	.036 1593	.040 8080	.043 1724	.045 5584

Table 12. Annuity 1 Will Buy—(Continued)

ANNUITY WHICH 1 WILL BUY. $A_1 = \frac{1}{A} + i$

n	4¾%	5%	6%	7%	8%
1	1.047 5000	1.050 0000	1.060 0000	1.070 0000	1.080 0000
2	.535 9005	.537 8049	.545 4369	.553 0918	.560 7692
3	.365 4897	.367 2086	.374 1098	.381 0517	.388 0335
4	.280 3759	.282 0118	.288 5915	.295 2281	.301 9208
5	.229 3809	.230 9748	.237 3964	.243 8907	.250 4564
6	.195 4451	.197 0175	.203 3626	.209 7958	.216 3154
7	.171 2574	.172 8198	.179 1350	.185 5532	.192 0724
8	.153 1620	.154 7218	.161 0359	.167 4678	.174 0148
9	.139 1280	.140 6901	.147 0222	.153 4865	.160 0797
10	.127 9370	.129 5046	.135 8680	.142 3775	.149 0295
11	.118 8134	.120 3889	.126 7929	.133 3569	.140 0753
12	.111 2402	.112 8254	.119 2770	.125 9020	.132 6950
13	.104 8595	.106 4558	.112 9601	.119 6508	.126 5218
14	.099 4156	.101 0240	.107 5849	.114 3449	.121 2968
15	.094 7211	.096 3423	.102 9628	.109 7946	.116 8295
16	.090 6353	.092 2699	.098 9521	.105 8576	.112 9769
17	.087 0506	.088 6991	.095 4448	.102 4252	.109 6294
18	.083 8834	.085 5462	.092 3565	.099 4126	.106 7021
19	.081 0677	.082 7450	.089 6209	.096 7530	.104 1276
20	.078 5505	.080 2426	.087 1846	.094 3929	.101 8522
21	.076 2891	.077 9961	.085 0046	.092 2890	.099 8322
22	.074 2485	.075 9705	.083 0456	.090 4058	.098 0321
23	.072 3997	.074 1368	.081 2785	.088 7139	.096 4222
24	.070 7187	.072 4709	.079 6790	.087 1890	.094 9780
25	.069 1851	.070 9525	.078 2267	.085 8105	.093 6788
26	.067 7819	.069 5643	.076 9044	.084 5610	.092 5071
27	.066 4944	.068 2919	.075 6972	.083 4257	.091 4481
28	.065 3102	.067 1225	.074 5926	.082 3919	.090 4889
29	.064 2183	.066 0455	.073 5796	.081 4486	.089 6185
30	.063 2095	.065 0514	.072 6489	.080 5864	.088 8274
31	.062 2755	.064 1321	.071 7922	.079 7969	.088 1073
32	.061 4093	.063 2804	.071 0023	.079 0729	.087 4508
33	.060 6046	.062 4900	.070 2729	.078 4081	.086 8516
34	.059 8557	.061 7554	.069 5984	.077 7967	.086 3041
35	.059 1579	.061 0717	.068 9739	.077 2340	.085 8033
36	.058 5068	.060 4345	.068 3948	.076 7153	.085 3447
37	.057 8984	.059 8398	.067 8574	.076 2368	.084 9244
38	.057 3293	.059 2842	.067 3581	.075 7950	.084 5389
39	.056 7964	.058 7646	.066 8938	.075 3868	.084 1851
40	.056 2968	.058 2782	.066 4615	.075 0091	.083 8602
41	.055 8279	.057 8223	.066 0589	.074 6596	.083 5615
42	.055 3876	.057 3947	.065 6834	.074 3359	.083 2868
43	.054 9736	.056 9933	.065 3331	.074 0359	.083 0341
44	.054 5842	.056 6162	.065 0061	.073 7577	.082 8015
45	.054 2175	.056 2617	.064 7005	.073 4996	.082 5873
46	.053 8720	.055 9282	.064 4148	.073 2600	.082 3899
47	.053 5463	.055 6142	.064 1477	.073 0374	.082 2080
48	.053 2390	.055 3184	.063 8977	.072 8307	.082 0403
49	.052 9489	.055 0396	.063 6636	.072 6385	.081 8856
50	.052 6749	.054 7767	.063 4443	.072 4598	.081 7429
60	.050 6271	.052 8282	.061 8757	.071 2292	.080 7980
70	.049 4192	.051 6992	.061 0331	.070 6195	.080 3676
80	.048 6888	.051 0296	.060 5725	.070 3136	.080 1699
90	.048 2405	.050 6271	.060 3184	.070 1590	.080 0786
100	.047 9629	.050 3831	.060 1774	.070 0808	.080 0364

SINKING FUND CALCULATIONS.—Sinking funds are usually used to accumulate sums for the **extinguishment of debts or the replacement of assets.** Such sums consist of periodical contributions and thus form annuities. Such problems are not uncommon in business. Corporations floating bond issues frequently advertise that sinking funds will be created to retire the issues at maturity.

The problem becomes one of determining what sum shall be set aside periodically to provide a sinking fund. This is equivalent to determining the amount of an annuity of $1 at the given rate of interest for the number of periods and dividing the amount thus found into the total amount to be retired. The sinking fund factor is found by means of the following formula:

$$\text{Sinking fund factor} = \frac{S.\ F.}{A}$$

S. F. represents the amount to be accumulated in the sinking fund or the bond issue to be retired and *A* represents the amount of the annuity of $1 for a given number of periods at a given rate of interest.

Example: A corporation on June 1, 1922 issued bonds due June 1, 1928, to the amount of $200,000, bearing interest at 6% per annum payable semi-annually. Provision was made to set up a sinking fund to retire the entire issue at maturity.

There are 12 interest periods with interest at 3%. The factor 14.1920296 is obtained from Table 10 "The Amount of an Annuity," in the 3% column and on the line corresponding to 12 periods.

Dividing $200,000, the total bond issue, by 14.1920296, gives $14,092.42 as the semi-annual sinking fund instalment.

SCHEDULE OF SINKING FUND INSTALMENTS.—The following schedule shows the periodical amounts set up and the interest earned on the accumulated balances in the sinking fund. The total semi-annual instalments plus the accumulated interest earned by the sinking fund equal $200,000, the accumulated amount in the sinking fund June 1, 1928, the date of maturity of the bonds:

Date	Semi-Annual Instalment	Interest at 3% on Accumulated Sinking Fund	Total Additions to Sinking Fund	Accumulated Amounts in Sinking Fund
June 1, 1922.....	–	–	–	–
Dec. 1, 1922.....	$ 14,092.42	–	$ 14,092.42	$ 14,092.42
June 1, 1923.....	14,092.42	$ 422.77	14,515.19	28,607.61
Dec. 1, 1923.....	14,092.42	858.23	14,950.65	43,558.26
June 1, 1924.....	14,092.42	1,306.75	15,399.17	58,957.43
Dec. 1, 1924.....	14,092.42	1,768.71	15,861.13	74,818.56
June 1, 1925.....	14,092.42	2,244.55	16,336.97	91,155.53
Dec. 1, 1925.....	14,092.42	2,734.66	16,827.08	107,982.61
June 1, 1926.....	14,092.42	3,239.48	17,331.90	125,314.51
Dec. 1, 1926.....	14,092.42	3,759.43	17,851.85	143,166.36
June 1, 1927.....	14,092.42	4,294.99	18,387.41	161,553.77
Dec. 1, 1927.....	14,092.42	4,846.61	18,939.03	180,492.80
June 1, 1928.....	14,092.42	5,414.78	19,507.20	200,000.00
	$169,109.04	$30,890.96	$200,000.00	

SINKING FUNDS FOR CALLABLE BONDS.—Some callable bonds require that a sinking fund be set up to retire them as soon as possible. An example of such a problem is given in the following illustration.

The Brass Fixture Co. on May 1, 1920, issued $300,000, 6% bonds due May 1, 1928, interest payable semi-annually. The bonds are in denominations of $1,000 and are callable by lot at par and accrued interest. The present value of an annuity of $1 for 16 periods at 3%, is 12.5611020 as shown from Table 11, "Present Value of Annuity."

Dividing $300,000 by 12.5611020 gives $23,883.25, as the semi-annual instalment out of which to pay the interest charges and retire the bonds. A schedule showing how the bonds are retired is given below.

On November 1, 1920, out of $23,883.25 the semi-annual sinking fund instalment, $9,000 is due as interest and the balance, $14,883.25 can be applied against the principal outstanding. The bonds, however, are of $1,000 denominations: hence it is necessary to retire an even amount, say, fifteen bonds. This necessitates setting aside $24,000, the first time. The more bonds retired at the end of each period the smaller the interest due and consequently the larger the amount available to retire the bonds. A practical requirement of this problem is that it is necessary to adhere as closely as possible to the $14,883.25, so that no one period shall be burdened with a greater addition to the reserve than another. The payment made May 1, 1921, will require $8,550 for interest, leaving $15,333.25 to be used for retiring bonds. Therefore, fifteen will again be retired. In the next period the interest charges are $8,100 which leaves $15,783.25 to be used for the retirement of bonds. This amount with a small addition will retire sixteen bonds.

SCHEDULE OF SINKING FUND INSTALMENTS, INTEREST PAYMENTS AND BOND RETIREMENT FOR CALLABLE BOND ISSUE.—

Date	Outstanding	Semi-annual Amount to Pay Interest and Retire Bonds	Interest at 3% Semi-annual Payment	Par Value of Bonds Retired	Number of Bonds Retired
May 1, 1920	$300,000	—	—	—	—
Nov. 1, 1920	285,000	$ 24,000	$ 9,000	$ 15,000	15
May 1, 1921	270,000	23,550	8,550	15,000	15
Nov. 1, 1921	254,000	24,100	8,100	16,000	16
May 1, 1922	238,000	23,620	7,620	16,000	16
Nov. 1, 1922	221,000	24,140	7,140	17,000	17
May 1, 1923	204,000	23,630	6,630	17,000	17
Nov. 1, 1923	186,000	24,120	6,120	18,000	18
May 1, 1924	168,000	23,580	5,580	18,000	18
Nov. 1, 1924	149,000	23,940	4,940	19,000	19
May 1, 1925	130,000	23,470	4,470	19,000	19
Nov. 1, 1925	110,000	23,900	3,900	20,000	20
May 1, 1926	89,000	24,300	3,300	21,000	21
Nov. 1, 1926	68,100	23,670	2,670	21,000	21
May 1, 1927	46,000	24,040	2,040	22,000	22
Nov. 1, 1927	23,000	24,380	1,380	23,000	23
May 1, 1928	—	23,690	690	23,000	23
		$382,130	$82,130	$300,000	300

Bond Calculations

DEFINITIONS.—The **par value** of a bond is the amount stated on its face. The **redemption value** is the price at which the bond will be redeemed. In many old issues this is the same as par value; in many more recent issues **premiums are paid** when bonds are redeemed before or at maturity.

CLASSIFICATION OF BONDS ON BASIS OF RETIREMENT.—For the purpose of this section, bonds may be divided into three general classes based on the method under which they are retired: (1) bonds that mature on a given date; (2) bonds that can be called in under certain named conditions, at the option of the issuing company at a specified price before the maturity date of other bonds of the same issue; (3) serial bonds, or those that are redeemable in given amounts on specified dates during the life of the entire issue.

PREMIUM AND DISCOUNT ON BONDS.—When bonds sell at a price greater than par, they are said to sell at a **premium,** and when at a price less than par they are said to sell at a **discount.**

NOMINAL AND EFFECTIVE RATES OF INTEREST.—The purchase of a bond at a premium reduces the yield of that bond from the rate stated on its face, which is the **nominal rate,** to another but lower rate which is the **effective rate.**

PRICE TO BE PAID FOR BONDS TO GIVE A CERTAIN YIELD.—The determination of the price that should be paid for a bond of a known nominal rate to give a desired yield can be shown by the following illustration.

Example: What price shall be paid for a 6% 20-year bond, interest payable semi-annually, to yield a return of 5% per annum?

In dealing with this problem there are two facts to be considered: (1) that the face value of the bond will be returned to the holder in 20 years, and (2) that the holder will receive $30 every 6 months during the life of the issue for each $1,000 invested. The present value of $1 and the present value of an annuity of $1 are the factors involved. The question resolves itself into finding the present value of a $1,000 bond at 5% interest per annum, compounded semi-annually, plus the present value of an annuity of $30 compounded for 40 periods at 2½% per period.

From Tables 9 and 11 the following statement is built:

The present value of $1 for 40 periods at 2½% is	$ .3724306
The present value of an annuity of $1 for 40 periods at 2½% is	25.1027751
$1,000 × .3724306	$ 372.43
$ 30 × 25.1027751	753.08
Price to be paid for this bond	$1,125.51

The preceding illustration covered a case in which the bond sold at a premium. To illustrate the case of a bond selling at a discount take the same data given in the above problem, with the exception of the yield, which is to be 7%.

From Tables 9 and 11 the following statement is built:

The present value of $1 for 40 periods at 3½% is	.2525725
The present value of an annuity of $1 for 40 periods at 3½% is	21.3550723
$1,000 × .2525725	$252.57
$ 30 × 21.3550723	640.65
Price to be paid for this bond	$893.22

BOND TABLES.—Bond tables have been devised to simplify the labor involved in determining

1. The price to be paid when the yield is known
2. The yield when the cost is known.

Such tables usually give the common investment yield rates on a semi-annual basis, and for periods of maturity varying from one year to 100 years at rates that range from 3% to 8% per annum.

To illustrate the use of such tables the following five examples are given, in connection with which Tables 13, 14, 15, 16, taken from Sprague's Extended Bond Tables, are used.

How to Find the Price of a Bond When the Yield is Known.—

Example 1: What price shall be paid for a $1,000 bond, due 18 years hence, bearing interest at 4½% per annum, payable semi-annually, to yield 5% per annum on the investment.

In the 4½% table (Table 15) look down the column headed 18 years until the line of net income of 5% is reached. The price to be paid for the bond is $941.11.

Example 2: An advertisement contains in part the following information "These 3½% bonds maturing in 9 years will yield the purchaser 4.23% per annum on his investment." What price shall be paid for the bonds? This is similar to the problem above except that the yield rate will not be found in the table but will have to be obtained by interpolation. Proceed as follows: In the 3½% table (Table 13) headed 9 years, set down the price of a $1,000 bond at 4.20 and 4.25%

Yield	Price
4.20	$947.98633
4.25	944.39289
.05	$ 3.59344
.01	$ .71869
.03	$ 2.15606
4.20	$947.98633
.03	2.15606
4.23	$945.83027

The price to be paid for each $1,000 bond is $945.83.

Example 3: The following example illustrates how to find the value of a bond whose life from date of purchase to maturity can not be found in the table. Find the value of a 5% bond maturing in 22 years and 4 months to yield 3¾% on the investment.

From the 5% table (Table 16) in the column headed 22 years with a yield of 3¾% we find the value to be $1,186.13483 for each $1,000 bond. However, the time is 4 months greater. As the table gives a value of $1,188.84401 for 22½ years, we may interpolate to find the value for 22 years and 4 months.

22½	years	$1,188.84401
22	years	1,186.13483
½	year or 6 months	$ 2.70918
1	month	$ .45153
4	months	$ 1.80612
22	years	1,186.13483
22 years 4 months		$1,187.94095

The value required is $1,187.94 for each $1,000 bond.

How to Find the Yield When the Cost is Known.—

Example 4: A problem that occurs quite frequently and which is somewhat difficult of solution by ordinary formula and even then requiring the use of logarithms, may be more easily solved by the use of bond tables. Such a problem may be stated as follows. What rate of interest may an investor expect who pays 118¾ for a 4½% bond maturing in 19½ years?

Turn to the 4½% table (Table 15) in the column headed 19½ years. Follow down the column until the value 118.75 is reached. It will be found to be on the net income line of 3.20%. In other words, a 4½% bond bought at 118¾ maturing in 19½ years will yield 3.20% per annum on the investment.

Example 5: When the value does not appear on the table a slight modification of the proceedure outlined in the preceding problem must be made. This is shown in the following illustration. What rate of interest may an investor expect who pays 97½ for a 4% $1,000 bond maturing in 7 years?

Turn to the 4% table (Table 14) and follow down the column headed 7 years. It will be seen that 97½ does not appear on that column. It lies between two figures which represent a net income rate of 4.40% and 4.45%.

4.40%	976.12485
4.45	973.18736
	2.93749

The difference between the price paid 975.00000 and the price at 4.40, namely, 976.12485 is 1.12485. The ratio of 1.12485 to 2.93749 multiplied by the difference on income rate .05 will give the amount to be added to 4.40 to give the net income required. To put it more simply, to travel 5 units of net income, it requires 293749 units of price. As we only wish to travel 112485 units of price, we must travel 112485/293749 parts of those 5 units of net income. The ratio of 112485/293749 is .3829289. Multiplying this by .05 gives .01914644. Adding this to 4.40 gives the rate of interest the investor may expect which is 4.41914644%.

Table 13. Values, to the nearest Cent, of a Bond for $1,000,000 at 3½% Interest, payable semi-annually

Net Inc.	8 Years	8½ Years	9 Years	9½ Years	10 Years
2 50	1 072 101 46	1 076 149 59	1 080 147 74	1 084 096 54	1 087 996 58
2 55	1 068 357 29	1 072 186 91	1 075 968 32	1 079 702 11	1 083 388 91
2 60	1 064 628 15	1 068 241 02	1 071 807 52	1 075 328 26	1 078 803 81
2 65	1 060 913 97	1 064 311 84	1 067 665 27	1 070 974 86	1 074 241 16
2 70	1 057 214 68	1 060 399 29	1 063 541 48	1 066 641 82	1 069 700 86
2 75	1 053 530 23	1 056 503 31	1 059 436 06	1 062 329 04	1 065 182 77
2 80	1 049 860 54	1 052 623 80	1 055 348 92	1 058 036 41	1 060 686 79
2 85	1 046 205 55	1 048 760 71	1 051 279 97	1 053 763 83	1 056 212 80
2 90	1 042 565 20	1 044 913 95	1 047 229 12	1 049 511 21	1 051 760 68
2 95	1 038 939 42	1 041 083 44	1 043 196 30	1 045 278 44	1 047 330 32
3 00	1 035 328 16	1 037 269 12	1 039 181 40	1 041 065 42	1 042 921 60
3 05	1 031 731 35	1 033 470 91	1 035 184 35	1 036 872 05	1 038 534 40
3 10	1 028 148 92	1 029 688 74	1 031 205 06	1 032 698 24	1 034 168 63
3 15	1 024 580 81	1 025 922 53	1 027 243 45	1 028 543 88	1 029 824 15
3 20	1 021 026 97	1 022 172 22	1 023 299 43	1 024 408 88	1 025 500 87
3 25	1 017 487 33	1 018 437 72	1 019 372 91	1 020 293 15	1 021 198 67
3 30	1 013 961 83	1 014 718 97	1 015 463 81	1 016 196 57	1 016 917 43
3 35	1 010 450 41	1 011 015 89	1 011 572 06	1 012 119 06	1 012 657 06
3 40	1 006 953 00	1 007 328 42	1 007 697 56	1 008 060 53	1 008 417 43
3 45	1 003 469 55	1 003 656 48	1 003 840 23	1 004 020 87	1 004 198 45
3 50	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00
3 55	996 544 28	996 358 91	996 176 78	995 997 81	995 821 97
3 60	993 102 35	992 733 15	992 370 48	992 014 22	991 664 27
3 65	989 674 12	989 122 64	988 581 03	988 049 13	987 526 77
3 70	986 259 56	985 527 31	984 808 35	984 102 46	983 409 38
3 75	982 858 60	981 947 09	981 052 36	980 174 09	979 311 99
3 80	979 471 17	978 381 92	977 312 97	976 263 96	975 234 50
3 85	976 097 23	974 831 72	973 590 11	972 371 95	971 176 80
3 90	972 736 72	971 296 44	969 883 70	968 497 99	967 138 79
3 95	969 389 57	967 775 99	966 193 67	964 641 99	963 120 36
4 00	966 055 73	964 270 32	962 519 92	960 803 84	959 121 42
4 05	962 735 14	960 779 36	958 862 39	956 983 48	955 141 85
4 10	959 427 74	957 303 03	955 221 00	953 180 79	951 181 57
4 15	956 133 49	953 841 28	951 595 67	949 395 71	947 240 47
4 20	952 852 31	950 394 04	947 986 33	945 628 13	943 318 45
4 25	949 584 16	946 961 24	944 392 89	941 877 98	939 415 40
4 30	946 328 98	943 542 81	940 815 28	938 145 16	935 531 24
4 35	943 086 72	940 138 70	937 253 44	934 429 59	931 665 86
4 40	939 857 31	936 748 83	933 707 27	930 731 19	927 819 17
4 45	936 640 70	933 373 15	930 176 72	927 049 86	923 991 06
4 50	933 436 84	930 011 58	926 661 69	923 385 52	920 181 44
4 55	930 245 68	926 664 07	923 162 13	919 738 09	916 390 21
4 60	927 067 15	923 330 55	919 677 96	916 107 48	912 617 29
4 65	923 901 21	920 010 96	916 209 09	912 493 62	908 862 56
4 70	920 747 80	916 705 23	912 755 47	908 896 41	905 125 95
4 75	917 606 86	913 413 30	909 317 02	905 315 77	901 407 35
4 80	914 478 35	910 135 11	905 893 66	901 751 62	897 706 66
4 85	911 362 21	906 870 60	902 485 33	898 203 89	894 023 81
4 90	908 258 39	903 619 71	899 091 95	894 672 48	890 358 69
4 95	905 166 83	900 382 36	895 713 46	891 157 31	886 711 21
5 00	902 087 48	897 158 52	892 349 77	887 658 31	883 081 28

Table 14. Values, to the nearest Cent, of a Bond for $1,000,000 at 4% Interest, payable semi-annually

Net Inc.	5½ Years	6 Years	6½ Years	7 Years	7½ Years
2 50	1 076 633 53	1 083 094 84	1 089 476 38	1 095 779 15	1 102 004 09
2 55	1 073 971 71	1 080 199 17	1 086 348 23	1 092 419 88	1 098 415 09
2 60	1 071 317 52	1 077 312 46	1 083 230 47	1 089 072 52	1 094 839 61
2 65	1 068 670 93	1 074 434 67	1 080 123 04	1 085 737 03	1 091 277 60
2 70	1 066 031 92	1 071 565 78	1 077 025 93	1 082 413 35	1 087 729 01
2 75	1 063 400 46	1 068 705 75	1 073 939 09	1 079 101 45	1 084 193 78
2 80	1 060 776 52	1 065 854 56	1 070 862 48	1 075 801 27	1 080 671 86
2 85	1 058 160 09	1 063 012 17	1 067 796 07	1 072 512 77	1 077 163 19
2 90	1 055 551 14	1 060 178 55	1 064 739 83	1 069 235 90	1 073 667 72
2 95	1 052 949 65	1 057 353 68	1 061 693 70	1 065 970 63	1 070 185 40
3 00	1 050 355 59	1 054 537 53	1 058 657 66	1 062 716 91	1 066 716 17
3 05	1 047 768 94	1 051 730 06	1 055 631 67	1 059 474 68	1 063 259 97
3 10	1 045 189 68	1 048 931 24	1 052 615 70	1 056 243 92	1 059 816 76
3 15	1 042 617 78	1 046 141 06	1 049 609 70	1 053 024 57	1 056 386 48
3 20	1 040 053 22	1 043 359 47	1 046 613 65	1 049 816 58	1 052 969 08
3 25	1 037 495 98	1 040 586 45	1 043 627 50	1 046 619 93	1 049 564 50
3 30	1 034 946 03	1 037 821 97	1 040 651 22	1 043 434 55	1 046 172 70
3 35	1 032 403 35	1 035 066 00	1 037 684 78	1 040 260 42	1 042 793 62
3 40	1 029 867 93	1 032 318 51	1 034 728 13	1 037 097 48	1 039 427 22
3 45	1 027 339 73	1 029 579 48	1 031 781 25	1 033 945 69	1 036 073 42
3 50	1 024 818 73	1 026 848 87	1 028 844 10	1 030 805 01	1 032 732 20
3 55	1 022 304 91	1 024 126 66	1 025 916 64	1 027 675 41	1 029 403 49
3 60	1 019 798 25	1 021 412 82	1 022 998 84	1 024 556 82	1 026 087 25
3 65	1 017 298 73	1 018 707 32	1 020 090 67	1 021 449 22	1 022 783 42
3 70	1 014 806 32	1 016 010 13	1 017 192 08	1 018 352 56	1 019 491 96
3 75	1 012 321 00	1 013 321 23	1 014 303 05	1 015 266 79	1 016 212 80
3 80	1 009 842 75	1 010 640 58	1 011 423 53	1 012 191 89	1 012 945 92
3 85	1 007 371 55	1 007 968 16	1 008 553 51	1 009 127 80	1 009 691 24
3 90	1 004 907 37	1 005 303 94	1 005 692 93	1 006 074 48	1 006 448 73
3 95	1 002 450 20	1 002 647 90	1 002 841 77	1 003 031 89	1 003 218 33
4 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00
4 05	997 556 76	997 360 22	997 167 58	996 978 76	996 793 68
4 10	995 120 46	994 728 53	994 344 47	993 968 12	993 599 34
4 15	992 691 08	992 104 90	991 530 64	990 968 06	990 416 91
4 20	990 268 59	989 489 32	988 726 07	987 978 52	987 246 35
4 25	987 852 97	986 881 74	985 930 71	984 999 47	984 087 61
4 30	985 444 21	984 282 14	983 144 53	982 030 87	980 940 65
4 35	983 042 27	981 690 50	980 367 51	979 072 68	977 805 41
4 40	980 647 14	979 106 79	977 599 60	976 124 85	974 681 85
4 45	978 258 80	976 530 98	974 840 78	973 187 36	971 569 93
4 50	975 877 22	973 963 05	972 091 01	970 260 15	968 469 59
4 55	973 502 39	971 402 97	969 350 25	967 343 20	965 380 78
4 60	971 134 28	968 850 71	966 618 49	964 436 45	962 303 47
4 65	968 772 87	966 306 25	963 895 68	961 539 88	959 237 60
4 70	966 418 15	963 769 57	961 181 79	958 653 44	956 183 13
4 75	964 070 09	961 240 62	958 476 80	955 777 09	953 140 02
4 80	961 728 66	958 719 40	955 780 66	952 910 80	950 108 21
4 85	959 393 86	956 205 87	953 093 35	950 054 53	947 087 65
4 90	957 065 65	953 700 00	950 414 84	947 208 24	944 078 32
4 95	954 744 03	951 201 78	947 745 09	944 371 89	941 080 15
5 00	952 428 96	948 711 18	945 084 08	941 545 44	938 093 11

Table 15. Values, to the nearest Cent, of a Bond for $1,000,000 at 4½% Interest, payable semi-annually

Net Inc.	18 Years	18½ Years	19 Years	19½ Years	20 Years
2 50	1 288 472 67	1 294 787 83	1 301 025 01	1 307 185 20	1 313 269 33
2 55	1 280 072 46	1 286 173 74	1 292 198 21	1 298 146 84	1 304 020 58
2 60	1 271 740 13	1 277 630 93	1 283 446 13	1 289 186 70	1 294 853 60
2 65	1 263 475 09	1 269 158 74	1 274 768 06	1 280 304 03	1 285 767 61
2 70	1 255 276 76	1 260 756 55	1 266 163 34	1 271 498 12	1 276 761 83
2 75	1 247 144 54	1 252 423 92	1 257 631 29	1 262 768 23	1 267 835 49
2 80	1 239 077 87	1 244 159 63	1 249 171 23	1 254 113 64	1 258 987 81
2 85	1 231 076 15	1 235 963 67	1 240 782 52	1 245 533 66	1 250 218 06
2 90	1 223 138 83	1 227 835 22	1 232 464 49	1 237 027 59	1 241 525 47
2 95	1 215 265 35	1 219 773 68	1 224 216 49	1 228 594 72	1 232 909 31
3 00	1 207 455 13	1 211 778 46	1 216 037 89	1 220 234 37	1 224 368 84
3 05	1 199 707 64	1 203 848 94	1 207 928 04	1 211 945 86	1 215 903 34
3 10	1 192 022 31	1 195 984 55	1 199 886 32	1 203 728 52	1 207 512 09
3 15	1 184 398 62	1 188 184 71	1 191 912 10	1 195 581 68	1 199 194 37
3 20	1 176 836 02	1 180 448 83	1 184 004 76	1 187 504 68	1 190 949 49
3 25	1 169 333 97	1 172 776 35	1 176 163 69	1 179 496 87	1 182 776 75
3 30	1 161 891 95	1 165 166 70	1 168 388 29	1 171 557 59	1 174 675 45
3 35	1 154 509 44	1 157 619 31	1 160 677 96	1 163 686 21	1 166 644 91
3 40	1 147 185 91	1 150 133 64	1 153 032 09	1 155 882 10	1 158 684 46
3 45	1 139 920 85	1 142 709 12	1 145 450 11	1 148 144 61	1 150 793 43
3 50	1 132 713 76	1 135 345 22	1 137 931 42	1 140 473 14	1 142 971 15
3 55	1 125 564 13	1 128 041 40	1 130 475 46	1 132 867 07	1 135 216 97
3 60	1 118 471 46	1 120 797 11	1 123 081 64	1 125 325 78	1 127 530 23
3 65	1 111 435 25	1 113 611 83	1 115 749 41	1 117 848 67	1 119 910 31
3 70	1 104 455 01	1 106 485 04	1 108 478 19	1 110 435 14	1 112 356 55
3 75	1 097 530 27	1 099 416 21	1 101 267 45	1 103 084 61	1 104 868 33
3 80	1 090 660 52	1 092 404 83	1 094 116 61	1 095 796 48	1 097 445 02
3 85	1 083 845 30	1 085 450 38	1 087 025 15	1 088 570 17	1 090 086 02
3 90	1 077 084 14	1 078 552 37	1 079 992 51	1 081 405 12	1 082 790 70
3 95	1 070 376 56	1 071 710 28	1 073 018 18	1 074 300 74	1 075 558 46
4 00	1 063 722 11	1 064 923 63	1 066 101 60	1 067 256 47	1 068 388 70
4 05	1 057 120 31	1 058 191 92	1 059 242 27	1 060 271 76	1 061 280 83
4 10	1 050 570 72	1 051 514 67	1 052 439 66	1 053 346 06	1 054 234 26
4 15	1 044 072 88	1 044 891 39	1 045 693 25	1 046 478 82	1 047 248 41
4 20	1 037 626 35	1 038 321 60	1 039 002 54	1 039 669 48	1 040 322 71
4 25	1 031 230 68	1 031 804 83	1 032 367 03	1 032 917 53	1 033 456 58
4 30	1 024 885 43	1 025 340 61	1 025 786 20	1 026 222 42	1 026 649 46
4 35	1 018 590 17	1 018 928 47	1 019 259 58	1 019 583 63	1 019 900 79
4 40	1 012 344 46	1 012 567 96	1 012 786 66	1 013 000 64	1 013 210 02
4 45	1 006 147 88	1 006 258 62	1 006 366 96	1 006 472 94	1 006 576 61
4 50	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00
4 55	993 900 41	993 791 65	993 685 30	993 581 33	993 479 67
4 60	987 848 68	987 633 12	987 422 40	987 216 42	987 015 08
4 65	981 844 41	981 523 97	981 210 82	980 904 79	980 605 70
4 70	975 887 18	975 463 78	975 050 10	974 645 92	974 251 02
4 75	969 976 59	969 452 11	968 939 79	968 439 35	967 950 53
4 80	964 112 25	963 488 52	962 879 42	962 284 59	961 703 70
4 85	958 293 75	957 572 61	956 868 55	956 181 16	955 510 04
4 90	952 520 69	951 703 95	950 906 73	950 128 58	949 369 04
4 95	946 792 70	945 882 11	944 993 52	944 126 40	943 280 21
5 00	941 109 37	940 106 70	939 128 49	938 174 14	937 243 06

Table 16. Values, to the nearest Cent, of a Bond for $1,000,000 at 5% Interest, payable semi-annually

Net Inc.	20½ Years	21 Years	21½ Years	22 Years	22½ Years
2 50	1 399 097 94	1 406 516 48	1 413 843 44	1 421 079 94	1 428 227 10
2 55	1 389 261 49	1 396 456 67	1 403 561 26	1 410 576 41	1 417 503 25
2 60	1 379 512 99	1 386 488 64	1 393 374 76	1 400 172 52	1 406 883 04
2 65	1 369 851 57	1 376 611 47	1 383 282 97	1 389 867 23	1 396 365 39
2 70	1 360 276 39	1 366 824 26	1 373 284 91	1 379 659 51	1 385 949 20
2 75	1 350 786 60	1 357 126 11	1 363 379 64	1 369 548 35	1 375 633 39
2 80	1 341 381 36	1 347 516 14	1 353 566 21	1 359 532 75	1 365 416 91
2 85	1 332 059 86	1 337 993 45	1 343 843 68	1 349 611 71	1 355 298 71
2 90	1 322 821 27	1 328 557 19	1 334 211 13	1 339 784 26	1 345 277 73
2 95	1 313 664 79	1 319 206 49	1 324 667 64	1 330 049 41	1 335 352 96
3 00	1 304 589 61	1 309 940 50	1 315 212 32	1 320 406 22	1 325 523 37
3 05	1 295 594 94	1 300 758 38	1 305 844 25	1 310 853 73	1 315 787 97
3 10	1 286 680 01	1 291 659 29	1 296 562 57	1 301 391 01	1 306 145 75
3 15	1 277 844 02	1 282 642 40	1 287 366 38	1 292 017 11	1 296 595 73
3 20	1 269 086 22	1 273 706 91	1 278 254 84	1 282 731 14	1 287 136 95
3 25	1 260 405 85	1 264 852 00	1 269 227 06	1 273 532 17	1 277 768 43
3 30	1 251 802 15	1 256 076 88	1 260 282 22	1 264 419 30	1 268 489 23
3 35	1 243 274 37	1 247 380 75	1 251 419 47	1 255 391 66	1 259 298 41
3 40	1 234 821 79	1 238 762 82	1 242 637 98	1 246 448 35	1 250 195 04
3 45	1 226 443 67	1 230 222 33	1 233 936 92	1 237 588 52	1 241 178 19
3 50	1 218 139 28	1 221 758 51	1 225 315 49	1 228 811 29	1 232 246 97
3 55	1 209 907 93	1 213 370 60	1 216 772 88	1 220 115 82	1 223 400 46
3 60	1 201 748 88	1 205 057 84	1 208 308 29	1 211 501 27	1 214 637 79
3 65	1 193 661 46	1 196 819 50	1 199 920 95	1 202 966 80	1 205 958 07
3 70	1 185 644 96	1 188 654 84	1 191 610 06	1 194 511 59	1 197 360 43
3 75	1 177 698 70	1 180 563 14	1 183 374 86	1 186 134 83	1 188 844 01
3 80	1 169 822 00	1 172 543 67	1 175 214 59	1 177 835 71	1 180 407 96
3 85	1 162 014 18	1 164 595 71	1 167 128 49	1 169 613 43	1 172 051 44
3 90	1 154 274 59	1 156 718 58	1 159 115 82	1 161 467 21	1 163 773 62
3 95	1 146 602 56	1 148 911 56	1 151 175 84	1 153 396 26	1 155 573 68
4 00	1 138 997 45	1 141 173 97	1 143 307 81	1 145 399 82	1 147 450 80
4 05	1 131 458 60	1 133 505 12	1 135 511 02	1 137 477 11	1 139 404 18
4 10	1 123 985 38	1 125 904 34	1 127 784 76	1 129 627 40	1 131 433 02
4 15	1 116 577 16	1 118 370 97	1 120 128 30	1 121 849 92	1 123 536 54
4 20	1 109 233 32	1 110 904 33	1 112 540 97	1 114 143 94	1 115 713 95
4 25	1 101 953 22	1 103 503 77	1 105 022 05	1 106 508 74	1 107 964 49
4 30	1 094 736 27	1 096 168 65	1 097 570 87	1 098 943 59	1 100 287 41
4 35	1 087 581 85	1 088 898 31	1 090 186 75	1 091 447 76	1 092 681 93
4 40	1 080 489 37	1 081 692 14	1 082 869 02	1 084 020 57	1 085 147 33
4 45	1 073 458 22	1 074 549 50	1 075 617 02	1 076 661 30	1 077 682 86
4 50	1 066 487 83	1 067 469 76	1 068 430 08	1 069 369 27	1 070 287 80
4 55	1 059 577 60	1 060 452 31	1 061 307 57	1 062 143 80	1 062 961 42
4 60	1 052 726 97	1 053 496 55	1 054 248 83	1 054 984 19	1 055 703 02
4 65	1 045 935 36	1 046 601 87	1 047 253 23	1 047 889 79	1 048 511 89
4 70	1 039 202 21	1 039 767 67	1 040 320 15	1 040 859 94	1 041 387 34
4 75	1 032 526 96	1 032 993 37	1 033 448 95	1 033 893 97	1 034 328 67
4 80	1 025 909 05	1 026 278 37	1 026 639 03	1 026 991 24	1 027 335 20
4 85	1 019 347 94	1 019 622 10	1 019 889 78	1 020 151 11	1 020 406 26
4 90	1 012 843 08	1 013 024 00	1 013 200 58	1 013 372 95	1 013 541 19
4 95	1 006 393 95	1 006 483 48	1 006 570 85	1 006 656 11	1 006 739 32
5 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00	1 000 000 00

COMPUTATION OF PRICE TO BE PAID FOR BONDS PURCHASED BETWEEN INTEREST DATES.—When a purchaser acquires a bond between the dates on which interest is payable, the seller is entitled to the interest that has accrued on the bond to the date of sale.

A slightly different computation must be made when the purchase date of bonds thus falls between interest dates. The rule for such a computation may be stated as follows:

1. The price of the bond is computed to the interest date immediately preceding and immediately following the date of the purchase.
2. The difference between these two prices is to be prorated from the preceding interest date to the date of the purchase and deducted from the price obtained at the preceding interest date.
3. To the price obtained under (2) add the interest accrued to the date of purchase.

Example: What price shall be paid for a $1,000 bond, dated February 1, 1922, and due February 1, 1932, bearing interest at 5½% per annum, payable February 1 and August 1, if purchased April 1, 1925, to yield 4½%?

The life of the bond from interest date preceding the date of purchase to maturity is 7 years.

The present value of $1 for 14 periods (February 1, 1925, to February 1, 1932) at 2¼% is	.7323414
The present value of an annuity of $1 for 14 periods at 2¼% is	11.8959392
The present value of $1 for 13 periods (August 1, 1925, to February 1, 1932) at 2¼% is	.7488190
The present value of an annuity of $1 for 13 periods at 2¼% is	11.1635979
$1,000 × .7323414	$ 732.34
$27.50 × 11.8959392	327.14
Price at February 1, 1925	$1,059.48
$1,000 × .7488190	$ 748.82
$27.50 × 11.1635979	307.00
Price at August 1, 1925	$1,055.82
Difference to be prorated	$ 3.66
Prorated to April 1, 1925, 1/3 of $3.66	$ 1.22
Price at February 1, 1925	$1,059.48
Less: Prorated difference	1.22
	$1,058.26
Accrued interest February 1, 1925, to April 1, 1925	9.17
Price at April 1, 1925	$1,067.43

Further Example: What price should be paid for a $1,000 bond dated November 1, 1920, and due November 1, 1935, bearing interest at 4% per annum payable May 1 and November 1, if purchased March 1, 1925 to yield 5%? The life of the bond from the interest date, November 1, 1924, to maturity is 11 years.

The present value of $1 for 22 periods (November 1, 1924, to November 1, 1935) at 2½% is	.5808647
The present value of an annuity of $1 for 22 periods at 2½% is	16.7654132
The present value of $1 for 21 periods (May 1, 1925, to November 11, 1935) at 2½% is	.5953863

The present value of an annuity of \$1 for 21 periods at 2½% is..	16.1845486
\$1,000 × .5808647	\$580.86
20 × 16.7654132	335.31
Price November 1, 1924	\$916.17
\$1,000 × .5953863	\$595.39
20 × 16.1845486	323.69
Price May 1, 1925	\$919.08
Difference to be prorated	\$ 2.91
Prorated to March 1, 1925, ⅔ of \$2.91	\$ 1.94
Price at November 1, 1924	\$916.17
Less: Prorated difference	1.94
	\$914.23
Accrued interest November 1, 1924, to March 1, 1925	13.33
Price at March 1, 1925	\$927.56

Bonus Calculations

COMPUTATION OF BONUS AFTER DEDUCTING FEDERAL INCOME TAXES.—Agreements are frequently made between employees and corporations wherein the former accept a nominal salary on the condition that they receive **a percentage of the net profits.** Such agreements should contain explicit definitions as to what constitutes net profits. Often the net profits are construed as the net taxable profits as reported in the federal income tax return less the federal income tax due.

The use of the following formula will solve such a problem unless excess profits taxes are restored:

Let N = net income before bonus and federal income tax
" B = bonus
" r = rate of federal income tax in decimals
" b = rate of bonus in decimals
" E = specific exemption, if any, allowable under the revenue act in force

The formula to be used is:

$$B = \frac{b}{1 - br}[N - r(N - E)]$$

Substitute known values for the above symbols as follows:

N = \$100,000
r = 12½% under the Revenue Act of 1924
b = 7%
E = none, as net income is in excess of \$25,000

Substituting these values in the formula gives

$$B = \frac{.07}{1 - (.07 \times .125)}[100{,}000 - (.125 \times 100{,}000)]$$

$$= \frac{.07}{1 - .00875}(100{,}000 - 12{,}500) = \frac{.07}{.99125}(87{,}500)$$

$$= \frac{6{,}125}{.99125} = \$6{,}179.07$$

The bonus therefore is \$6,179.07.

Proof of the correctness of this solution by the use of the foregoing formula can be obtained in the following manner.

PROOF:

Net income	$100,000.00	
Less: Bonus	6,179.07	
Net income after bonus	$ 93,820.93	
Tax at 12½% = $93,820.93 × .125 =		$ 11,727.62
Net income before tax and bonus		$100,000.00
Tax		11,727.62
Net income after tax		$ 88,272.38
Bonus at 7% on net income after taxes (88,272.38 × .07)		$ 6,179.07

which agrees with that derived from the above formula.

COMPUTATION OF BONUS AFTER DEDUCTION OF BOTH TAXES AND BONUS.—Frequently it is desired to determine the bonus after allowing for both tax and bonus. As in the previous illustration, the bonus is first deducted before determining the tax. After the tax has been computed, it, as well as the bonus, is deducted from the net income. The bonus is then determined from this new figure. Using the same symbols as in first case above, the formula becomes:

$$B = \frac{b}{1 - br + b}[N - r(N - E)]$$

Substituting as in the preceding case:

$$B = \frac{.07}{1 - .00875 + .07}[100{,}000 - 12{,}500]$$

$$= \frac{.07}{1.06125}(87{,}500)$$

$$= \$5{,}771.50$$

The bonus therefore is $5,771.50.

Proof of the correctness of the solution of this type of problem by the use of the formula can be made in the following manner:

PROOF:

Net income	$100,000.00	
Less: Bonus	5,771.50	
Net income after bonus	$ 94,228.50	
Tax at 12½% = $94,228.50 × .125 =		$ 11,778.56
Net income		$100,000.00
Less: Bonus	$ 5,771.50	
Tax	11,778.56	17,550.06
Net income upon which bonus is computed		$ 82,449.94
Bonus = $82,449.94 × .07 =		$ 5,771.50

which agrees with that derived from the above formula.

COMPUTATION OF BONUS AFTER DEDUCTION OF BONUS AND TAXES WITH EXEMPTION.—When the net income is greater than \$25,250, as under the Revenue Act of 1924, the value of E, the specific exemption, becomes zero and thus drops out of the computation. If the net income is less than \$25,250, then E, the exemption, is equal to \$2,000. Assume that the net income is \$22,000 and the rate of bonus is 10%. The bonus is to be determined after allowance for both taxes and bonus. The formula then is:

$$B = \frac{b}{1 - br + b}[N - r(N - E)]$$

Substituting:

$$B = \frac{.10}{1 - .0125 + .10}[22{,}000 - .125(22{,}000 - 2{,}000)]$$

$$= \frac{.10}{1.0875}[22{,}000 - 2{,}500]$$

$$= \frac{.10}{1.0875} \times 19{,}500 = \$1{,}793.10$$

The bonus then is \$1,793.10.

PROOF:

Net income before taxes and bonus		\$22,000.00
Bonus	\$1,793.10	
Exemption	2,000.00	3,793.10
Taxable net income		\$18,206.90
Tax at 12½% = \$18,206.90 × .125 =		\$ 2,275.86
Net income before taxes and bonus		\$22,000.00
Less: Tax	\$2,275.86	
Bonus	1,793.10	4,068.96
Amount upon which bonus is based		\$17,931.04

10% of this amount is the bonus, or \$1,793.10 as above.

Such problems occur in so many forms that it is impractical to supply a solution for each special condition.

Averages

DEFINITION.—An average is a number which may be considered representative of a **series of numbers.** It is frequently used in business as a means for comparing two or more series of numbers or groups.

TYPES OF AVERAGES.—There are various types of averages. The **four more important ones** are:

1. Simple average
2. Weighted average
3. Moving average
4. Progressive average

SIMPLE AVERAGE.—A simple average is an **arithmetical mean** and is obtained by adding together the units in the series and dividing the sum by the number of units.

Example: A problem illustrative of the method of finding a simple average frequently met with in business is to find the average profits of a concern for a given number of years, say from 1920 to 1924 inclusive.

Year	Net Profit
1920	$ 82,300
1921	61,200
1922	58,000
1923	86,600
1924	94,000
Total.....	$382,100

$$\text{Average is } \frac{\$382,100}{5} = 76,420$$

WEIGHTED AVERAGE.—A weighted average is necessary where the values entering into the computation differ in character in two or more ways. It differs from a simple average in that consideration is given to the fact that units of the series may have values which are different from one another in kind or character. Many business men are apt to use a simple average when a weighted average should be used to obtain a correct result.

Example: What is the average salary paid to the office staff?

No. of Individuals	Yearly Salary	Total
12	$ 1,800	$21,600
6	900	5,400
5	2,400	12,000
7	3,000	21,000
2	4,200	8,400
3	5,000	15,000
1	7,200	7,200
36	$24,500	$90,600

The simple average of the yearly salary would be $24,500 ÷ 7 = $3,500. This is absurd. The correct solution is obtained by dividing $90,600 by 36, which gives $2,516.67.

MOVING AVERAGE.—A moving average is obtained by taking the simple average of a group of terms. Then the first term of this group is dropped, a new term is added and a simple average is again obtained of the new group of terms. This process is continued until the entire series of terms has been exhausted. The number of terms in each group averaged must always remain the same.

Moving averages are used with best success in industries where there are no seasonal fluctuations. If there are seasonal fluctuations the moving averages **will accentuate the peaks and depressions** as they appear.

The example that best illustrates a moving average is that of obtaining the average monthly sales over a period of years.

Example: The following figures represent the monthly sales of a concern for a 2-year period expressed in round numbers:

	1923	1924		1923	1924
Jan.....	$12,000	$17,500	July.....	$12,500	$19,000
Feb.....	11,500	16,000	Aug.....	14,000	19,500
Mar.....	11,700	17,000	Sept.....	15,000	22,000
Apr.....	12,000	18,000	Oct.....	16,000	26,000
May.....	11,000	18,500	Nov.....	16,500	27,000
June.....	13,000	19,000	Dec.....	18,000	30,000

] Taking the year as the basis, first find the average for the 12 months, January December 1923, which amounts to $13,600. Next find the average for the -month period, February 1923, to January 1924. That is, January 1923 is opped from the computation, while January 1924 is included. The average then found to be $14,058.33. This process is continued, each time 1 month ng dropped at the beginning and one added at the end of the yearly period, ntil December 1924 is included. The following series is the result:

eriod (dates inclusive)	Moving Average
an: 1923–Dec. 1923	$13,600.00
eb. " –Jan. 1924	14,058.33
lar. " –Feb. "	14,433.33
pr. " –Mar. "	14,875.00
lay " –Apr. "	15,375.00
ne " –May "	16,000.00
ly " –June "	16,500.00
Aug. 1923–July 1924	$17,041.67
Sept. " –Aug. "	17,500.00
Oct. " –Sept. "	18,083.33
Nov. " –Oct. "	18,916.67
Dec. " –Nov. "	19,791.67
Jan. 1924–Dec. "	20,791.67

PROGRESSIVE AVERAGE.—A progressive average differs from a moving verage in that a simple average of the first two terms of a series is first obtained; ien a simple average of the first three terms is obtained and so on. Each me the simple average is taken of one more term than the preceding time ntil a final simple average is obtained of all terms in the series.

A progressive average **tends to smooth over peaks and depressions** and to ake the result appear to be more uniform than the conditions warrant.

Example: The following table shows the progressive average for the data iven in the preceding illustration. The first average is for the first 2 months f 1923, and the following averages are secured by including an additional onth each time.

	Progressive Average
n. 1923–Feb. 1923	$11,750.00
" –Mar. "	11,733.33
" –Apr. "	11,800.00
" –May "	11,640.00
" –June "	11,866.67
" –July "	11,957.14
" –Aug. "	12,212.50
" –Sept. "	12,522.22
" –Oct. "	12,870.00
" –Nov. "	13,200.00
" –Dec. "	13,600.00
" –Jan. 1924	13,900.00
Jan. 1923 –Feb. 1924	$14,050.00
" " –Mar. "	14,246.67
" " –Apr. "	14,481.25
" " –May "	14,717.65
" " –June "	14,955.56
" " –July "	15,168.42
" " –Aug. "	15,385.00
" " –Sept. "	15,700.00
" " –Oct. "	16,254.55
" " –Nov. "	16,639.13
" " –Dec. "	17,195.83

Use of Averages in Business

AVERAGING ACCOUNTS.—Averaging accounts is the process of finding single date when settlement of an account, consisting of several items due different dates, may be made without loss of interest to either party to the ansaction.

The **equated date** is the due date or date of settlement as determined by veraging the accounts.

The **focal date** is the assumed date of settlement for the purposes of computing the equated date. The focal date may be any date in the account, but it is usually more convenient to use the earliest or latest date.

TO FIND THE EQUATED DATE OF A ONE-SIDED ACCOUNT.—Take the following illustration from the books of a company.

1925	Amount	Terms	Due Date	Days to Focal Date	Day Dollars
Feb. 10	$ 600	30 days	Mar. 12	38	$22,800
Feb. 18	1,550	60 "	Apr. 19	—	—
Mar. 8	920	30 "	Apr. 7	12	11,040
	$3,070				$33.840

This account might have been settled on March 12, April 7, and April 19, but the debtor finds that he is unable to meet the account due March 12 and promises the creditor that he will anticipate one or both of the other two items so that the creditor will not have lost anything. Or again, it may be necessary to find the average date in order that interest may be computed on the balance instead of on the individual items in the account.

The problem is to determine the date that payment can be made in order that the account may be settled equitably between the interested parties.

To solve this problem take the latest date, April 19, as the focal date. Determine the number of days to the focal date as shown. Multiply the amount by the number of days to obtain the day dollars. The sum of day dollars, 33,840, divided by the total amount due in the account, $3,070, gives 11 days. This is the number of days back from the focal date to the equated due date to be found which is, therefore, **April 8.**

AVERAGING COMPOUND ACCOUNTS.—Compound accounts contain both debit and credit items, and when there are several items on each side, the computation becomes a trifle more complex but the principle remains exactly the same.

RULES FOR AVERAGING COMPOUND ACCOUNTS.—

1. Choose a focal date, using the same one for the debit and the credit side.
2. Find the number of days from the due date of the account to the focal date.
3. Compute the day dollars.
4. Find the balance of the account.
5. Find the difference in the day dollars, debit and credit.
6. Divide item 5 by item 4.
7. If the difference in the days dollars, debit and credit, is on the same side of the account as the balance of the account, count the number of days backward from the focal date. When the balances are on opposite sides, count the days forward from the focal date.

ILLUSTRATIONS OF AVERAGING COMPOUND ACCOUNTS.—Following are two examples to illustrate the operation of the rules set forth above.

Merchandise was purchased as follows:

May 28.....$1,500 n/60
June 6..... 2,350 n/60
June 17..... 3,100 n/30
June 28..... 1,600 n/30

Payments were made as follows:

July 17.....$2,000
July 23..... 1,800

Find the equated due date.

	Debit			Credit			
Due Date	Amount	Days to Focal Date	Day Dollars	Date Paid	Amount	Days to Focal Date	Day Dollars
July 17...	$3,100	19	$58,900	July 17....	$2,000	19	$38,000
July 27...	1,500	9	13,500	July 23....	1,800	13	23,400
July 28...	1,600	8	12,800				
Aug. 5...	2,350	—	—				
	$8,550		$85,200		$3,800		$61,400
	3,800		61,400				
	$4,750		$23,800				

Dividing 23,800 by 4,750, gives 5 days, from the focal date, August 5, which makes July 31 as the equated due date.

PROOF:

	Debit			Credit			
Date	Amount	Days to July 31	Day Dollars	Date Paid	Amount	Days to July 31	Day Dollars
July 17...	$3,100	14	$43,400	July 17....	$2,000	14	$28,000
July 27...	1,500	4	6,000	July 23....	1,800	8	14,400
July 28...	1,600	3	4,800	July 31....	4,750	—	—
			54,200				
Aug. 5...	2,350	5 disc.	11,750				
	$8,550		$42,450		$8,550		$42,400

The fact that the amount due on August 5 would be paid in advance makes an item of discount and consequently affects the account in the same manner as a credit does.

As illustrative of the **second type of problem** take the same data as in the foregoing example with the exception of the payments which are as follows:

July 17.....$3,000
July 25..... 1,600
July 27..... 2,400

	Debit			Credit			
Due Date	Amount	Days to Focal Date	Day Dollars	Date Paid	Amount	Days to Focal Date	Day Dollars
July 17...	$3,100	19	$58,900	July 17....	$3,000	19	$57,000
July 27...	1,500	9	13,500	July 25....	1,600	11	17,600
July 28...	1,600	8	12,800	July 27....	2,040	9	18,360
Aug. 5...	2,350	—	—				
	$8,550		$85,200		$6,640		$92,960
	6,640						85,200
	$1,910						$ 7,760

In this instance the balance in day dollars is on the credit side while the balance in the account is debit.

$$7{,}760 \div 1{,}910 = 4 \text{ days}$$

As the fractional part is less than half a day, it may be dropped. Since the balance of the day dollars is on the credit side while the balance of the account is a debit, we count 4 days **forward** from the focal date and arrive at August 9 as the equated due date.

PROOF:

Debit				Credit			
Due Date	Amount	Days to Aug. 9	Day Dollars	Date Paid	Amount	Days to Aug. 9	Day Dollars
July 17...	$3,100	23	$ 71,300	July 17....	$3,000	23	$ 69,000
July 27...	1,500	13	19,500	July 25....	1,600	15	24,000
July 28...	1,600	12	19,200	July 27....	2,040	13	26,520
Aug. 5...	2,350	4	9,400	Aug. 9....	1,910	—	—
	$8,550		$119,400		$8,550		$119,520

The difference of 120 day dollars out of a total of 119,400 shows that the fractional part over 4 days which was dropped was negligible.

Logarithms

USE AND PURPOSE OF LOGARITHMS.—By means of logarithms, extended multiplications and divisions are much simplified and complex arithmetical problems are readily solved. **Tables of logarithms** are as easily handled as are interest tables. Proficiency is only a matter of practice. In order to have a working knowledge of the use of logarithms it is necessary to understand the use of exponents.

An **exponent** is a number placed to the right of and a little above another number to indicate the number of times the latter is to be taken as a factor.

Thus, $2^4 = 16$, means that 2 has been taken as a factor 4 times, or $2 \times 2 \times 2 \times 2 = 16$.

LOGARITHMS ARE EXPONENTS.—The logarithm of any number is the exponent of that number to the base of 10. Thus, in the expression $10^3 = 1{,}000$, 3 is the exponent or logarithm of 1,000 to the base 10. The exponent 3 indicates the number of times 10 has been used as a factor to obtain the number 1,000. When extensive multiplications are made of one factor it is best to set up a table. Thus we find that a table of tens might be formed as follows:

$$\begin{aligned} 10^1 &= 10 \\ 10^2 &= 100 \\ 10^3 &= 1{,}000 \\ 10^4 &= 10{,}000 \\ 10^5 &= 100{,}000 \\ 10^6 &= 1{,}000{,}000 \\ 10^7 &= 10{,}000{,}000 \end{aligned}$$

From a study of this table it is evident that $10^7 = 10{,}000{,}000$, can be obtained by multiplying $1{,}000 \times 10{,}000$. This reveals the principal quality of exponents, namely, that multiplying numbers with like bases is equivalent to adding the exponents. In the illustration just given

$$\begin{aligned} 10^3 &= 1{,}000 \\ 10^4 &= 10{,}000 \\ \hline 10^7 &= 10{,}000{,}000 \\ \hline 10^2 &= 100 \\ 10^5 &= 100{,}000 \\ \hline 10^7 &= 100 \times 100{,}000 = 10{,}000{,}000 \end{aligned}$$

From an inspection of the table shown above it appears that the exponent and the number of ciphers following the whole number are in agreement. It follows then that the logarithm of 10,000 is 4 and the logarithm of 10,000,000 is 7.

CHARACTERISTIC AND MANTISSA.—From appropriate tables of logarithms the logarithm of 3 is found to be 0.4771213. The logarithm thus consists of two parts, the characteristic, which in this case is zero, and the mantissa, which is the decimal part of the number, namely, .4771213. The characteristic changes as the number of places to the left of the decimal point in the number itself changes. The mantissa is permanent.

In other words the logarithm of

$$\begin{aligned} 3. &= 0.4771213 \\ 30. &= 1.4771213 \\ 300. &= 2.4771213 \\ 3{,}000. &= 3.4771213 \end{aligned}$$

It is significant that the characteristic is one less than the number of figures that precede the decimal point. This is further shown by the following:

$$\begin{aligned} \text{Logarithm of } 371.2 &= 2.5696080 \\ \text{“ } \quad \text{“ } 3.712 &= 0.5696080 \end{aligned}$$

LOGARITHM OF A DECIMAL HAS A NEGATIVE CHARACTERISTIC.—When the number is a decimal, its characteristic is negative as shown by the logarithm of .3712 which is $\bar{1}.5696080$, and the logarithm of .003712, which is $\bar{3}.5696080$. The mantissa always remains positive, which permits the formulation of logarithmic tables.

How Negative Characteristics are Shown in Logarithms.—As stated, in the logarithm of a decimal the characteristic is negative but the mantissa is positive. To eliminate the resulting ambiguity of writing a negative characteristic as shown in the previous paragraph, there is substituted for the -3 its equal $7 - 10$, and the logarithm is written as $7.4771213 - 10$. By using this notation the computation is made much simpler. In writing the $- 10$, an extra spacing should be left between the last figure of the mantissa and the minus sign to avoid confusion in computation.

RULE GOVERNING THE CHARACTERISTICS OF LOGARITHMS.—The characteristic of the logarithm, **when positive,** is one less than the number of places in the number to the left of the decimal point.

The characteristic of the logarithm is **negative** when the number is a decimal and is one greater, numerically, than the number of ciphers that immediately follow the decimal point.

LOGARITHMIC TABLES.—Logarithmic tables have been prepared having mantissas with 4 to 10 places. It is not advisable to use tables giving logarithms with less than 6 or 7 places.

Typical Logarithmic Tables.—For illustrative purposes two pages of a logarithmic table (Table 17) are presented. These pages are taken (with some slight adaptations of form) from **Vegas Logarithmic Tables,** which give logarithms to 7 places, which answer for most practical purposes.

Table 17. Logarithmic Table

N.	Log	N.	Log	N.	Log	N.	Log	N.	Log
1	000 0000	51	707 5702	101	004 3214	151	178 9769	201	303 1961
2	301 0300	52	716 0033	102	008 6002	152	181 8436	202	305 3514
3	477 1213	53	724 2759	103	012 8372	153	184 6914	203	307 4960
4	602 0600	54	732 3938	104	017 0333	154	187 5207	204	309 6302
5	698 9700	55	740 3627	105	021 1893	155	190 3317	205	311 7539
6	778 1513	56	748 1880	106	025 3059	156	193 1246	206	313 8672
7	845 0980	57	755 8749	107	029 3838	157	195 8997	207	315 9703
8	903 0900	58	763 4280	108	033 4238	158	198 6571	208	318 0633
9	954 2425	59	770 8520	109	037 4265	159	201 3971	209	320 1463
10	000 0000	60	778 1513	110	041 3927	160	204 1200	210	322 2193
11	041 3927	61	785 3298	111	045 3230	161	206 8259	211	324 2825
12	079 1812	62	792 3917	112	049 2180	162	209 5150	212	326 3359
13	113 9434	63	799 3405	113	053 0784	163	212 1876	213	328 3796
14	146 1280	64	806 1800	114	056 9049	164	214 8438	214	330 4138
15	176 0913	65	812 9134	115	060 6978	165	217 4839	215	332 4385
16	204 1200	66	819 5439	116	064 4580	166	220 1081	216	334 4538
17	230 4489	67	826 0748	117	068 1859	167	222 7165	217	336 4597
18	255 2725	68	832 5089	118	071 8820	168	225 3093	218	338 4565
19	278 7536	69	838 8491	119	075 5470	169	227 8867	219	340 4441
20	301 0300	70	845 0980	120	079 1812	170	230 4489	220	342 4227
21	322 2193	71	851 2583	121	082 7854	171	232 9961	221	344 3923
22	342 4227	72	857 3325	122	086 3598	172	235 5284	222	346 3530
23	361 7278	73	863 3229	123	089 9051	173	238 0461	223	348 3049
24	380 2112	74	869 2317	124	093 4217	174	240 5492	224	350 2480
25	397 9400	75	875 0613	125	096 9100	175	243 0380	225	352 1825
26	414 9733	76	880 8136	126	100 3705	176	245 5127	226	354 1084
27	431 3638	77	886 4907	127	103 8037	177	247 9733	227	356 0259
28	447 1580	78	892 0946	128	107 2100	178	250 4200	228	357 9348
29	462 3980	79	897 6271	129	110 5897	179	252 8530	229	359 8355
30	477 1213	80	903 0900	130	113 9434	180	255 2725	230	361 7278
31	491 3617	81	908 4850	131	117 2713	181	257 6786	231	363 6120
32	505 1500	82	913 8139	132	120 5739	182	260 0714	232	365 4880
33	518 5139	83	919 0781	133	123 8516	183	262 4511	233	367 3559
34	531 4789	84	924 2793	134	127 1048	184	264 8178	234	369 2159
35	544 0680	85	929 4189	135	130 3338	185	267 1717	235	371 0679
36	556 3025	86	934 4985	136	133 5389	186	269 5129	236	372 9120
37	568 2017	87	939 5193	137	136 7206	187	271 8416	237	374 7483
38	579 7836	88	944 4827	138	139 8791	188	274 1578	238	376 5770
39	591 0646	89	949 3900	139	143 0148	189	276 4618	239	378 3979
40	602 0600	90	954 2425	140	146 1280	190	278 7536	240	380 2112
41	612 7839	91	959 0414	141	149 2191	191	281 0334	241	382 0170
42	623 2493	92	963 7878	142	152 2883	192	283 3012	242	383 8154
43	633 4685	93	968 4829	143	155 3360	193	285 5573	243	385 6063
44	643 4527	94	973 1279	144	158 3625	194	287 8017	244	387 3898
45	653 2125	95	977 7236	145	161 3680	195	290 0346	245	389 1661
46	662 7578	96	982 2712	146	164 3529	196	292 2561	246	390 9351
47	672 0979	97	986 7717	147	167 3173	197	294 4662	247	392 6970
48	681 2412	98	991 2261	148	170 2617	198	296 6652	248	394 4517
49	690 1961	99	995 6352	149	173 1863	199	298 8531	249	396 1993
50	698 9700	100	000 0000	150	176 0913	200	301 0300	250	397 9400

Table 17. Logarithmic Table—(Continued)

N.	Log	N.	Log	N.	Log	N.	Log	N.	Log
251	399 6737	301	478 5665	351	545 3071	401	603 1444	451	654 1765
252	401 4005	302	480 0069	352	546 5427	402	604 2261	452	655 1384
253	403 1205	303	481 4426	353	547 7747	403	605 3050	453	656 0982
254	404 8337	304	482 8736	354	549 0033	404	606 3814	454	657 0559
255	406 5402	305	484 2998	355	550 2284	405	607 4550	455	658 0114
256	408 2400	306	485 7214	356	551 4500	406	608 5260	456	658 9648
257	409 9331	307	487 1384	357	552 6682	407	609 5944	457	659 9162
258	411 6197	308	488 5507	358	553 8830	408	610 6602	458	660 8655
259	413 2998	309	489 9585	359	555 0944	409	611 7233	459	661 8127
260	414 9733	310	491 3617	360	556 3025	410	612 7839	460	662 7578
261	416 6405	311	492 7604	361	557 5072	411	613 8418	461	663 7009
262	418 3013	312	494 1546	362	558 7086	412	614 8972	462	664 6420
263	419 9557	313	495 5443	363	559 9066	413	615 9501	463	665 5810
264	421 6039	314	496 9296	364	561 1014	414	617 0003	454	666 5180
265	423 2459	315	498 3106	365	562 2929	415	618 0481	465	667 4530
266	424 8816	316	499 6871	366	563 4811	416	619 0933	466	668 3859
267	426 5113	317	501 0593	367	564 6661	417	620 1361	467	669 3169
268	428 1348	318	502 4271	368	565 8478	418	621 1763	468	670 2459
269	429 7523	319	503 7907	369	567 0264	419	622 2140	469	671 1728
270	431 3638	320	505 1500	370	568 2017	420	623 2493	470	672 0979
271	432 9693	321	506 5050	371	569 3739	421	624 2821	471	673 0209
272	434 5689	322	507 8559	372	570 5429	422	625 3125	472	673 9420
273	436 1626	323	509 2025	373	571 7088	423	626 3404	473	674 8611
274	437 7506	324	510 5450	374	572 8716	424	627 3659	474	675 7783
275	439 3327	325	511 8834	375	574 0313	425	628 3889	475	676 6936
276	440 9091	326	513 2176	376	575 1878	426	629 4096	476	677 6070
277	442 4798	327	514 5478	377	576 3414	427	630 4279	477	678 5184
278	444 0448	328	515 8738	378	577 4918	428	631 4438	478	679 4279
279	445 6042	329	517 1959	379	578 6392	429	632 4573	479	680 3355
280	447 1580	330	518 5139	380	579 7836	430	633 4685	480	681 2412
281	448 7063	331	519 8280	381	580 9250	431	634 4773	481	682 1451
282	450 2491	332	521 1381	382	582 0634	432	635 4837	482	683 0470
283	451 7864	333	522 4442	383	583 1988	433	636 4879	483	683 9471
284	453 3183	334	523 7465	384	584 3312	434	637 4897	484	684 8454
285	454 8449	335	525 0448	385	585 4607	435	638 4893	485	685 7417
286	456 3660	336	526 3393	386	586 5873	436	639 4865	486	686 6363
287	457 8819	337	527 6299	387	587 7110	437	640 4814	487	687 5290
288	459 3925	338	528 9167	388	588 8317	438	641 4741	488	688 4198
289	460 8978	339	530 1997	389	589 9496	439	642 4645	489	689 3089
290	462 3980	340	531 4789	390	591 0646	440	643 4527	490	690 1961
291	463 8930	341	532 7544	391	592 1768	441	644 4386	491	691 0815
292	465 3829	342	534 0261	392	593 2861	442	645 4223	492	691 9651
293	466 8676	343	535 2941	393	594 3926	443	646 4037	493	692 8469
294	468 3473	344	536 5584	394	595 4962	444	647 3830	494	693 7269
295	469 8220	345	537 8191	395	596 5971	445	648 3600	495	694 6052
296	471 2917	346	539 0761	396	597 6952	446	649 3349	496	695 4817
297	472 7564	347	540 3295	397	598 7905	447	650 3075	497	696 3564
298	474 2163	348	541 5792	398	599 8831	448	651 2780	498	697 2293
299	475 6712	349	542 8254	399	600 9729	449	652 2463	499	698 1005
300	477 1213	350	544 0680	400	602 0600	450	653 2125	500	698 9700

How to Use Logarithmic Tables.—How to use logarithmic tables can be shown best by a few concrete examples.

MULTIPLICATION BY USE OF LOGARITHMS.—

Example 1: Multiply 24 by 1.27 by the use of logarithmic tables.

$$\begin{aligned} \text{Log of } 24 &= 1.3802112 \\ \text{Log of } 1.27 &= 0.1038037 \\ \text{Log } (24 \times 1.27) &= 1.4840149 \end{aligned}$$

We now have the logarithm of the product. To obtain the number corresponding to this logarithm look in the table (Table 17) for the log nearest to this mantissa. This mantissa lies between .4828736, which corresponds to 304 in the table, and .4842998, which corresponds to 305. The difference between these mantissas is 14262. The difference between the mantissa .4840149 and the lower of the two is .11413. The ratio of 11413/14262 = .8, which is the decimal part between 304 and 305. Thus the number corresponding to a mantissa of 4840149 is 3048.

As the characteristic is one, it indicates that the number is greater than one and that there are two figures that precede the decimal point or the number represented by a logarithm 1.4840149 is 30.48.

Another example of multiplication by use of logarithms:

Example 2: Multiply 133 by .037.

The logarithm of .037 has a negative characteristic of 2. This is equivalent to a positive characteristic of 8 minus 10.

$$\begin{aligned} \text{Log } 133 &= 2.1238516 \\ \text{Log } .037 &= 8.5682017-10 \\ \text{Log } (133 \times .037) &= 10.6920533-10 \end{aligned}$$

Look up the mantissa .6920533. This lies between the logarithm of 492 and 493. The difference between these mantissas is 8818. The difference between the lower of the two and .6920533 is 882. This is very nearly one-tenth. The number corresponding to this logarithm is 4921. As the characteristic is zero (10 − 10), it means that there is one significant figure to the left of the decimal point, making the correct answer 4.921.

These illustrations bear out the statement that logarithms are exponents. As shown before, when multiplying numbers exponents are added. In the examples cited we added logarithms when multiplying numbers.

DIVISION BY USE OF LOGARITHMS.—Since division is the opposite of multiplication, we **subtract the logarithm** of the divisor from that of the dividend to obtain the logarithm of the quotient.

Example 1: Divide 439 by 2.31.

$$\begin{aligned} \text{Log of } 439 &= 2.6424645 \\ \text{Log of } 2.31 &= 0.3636120 \\ \text{Log } (439 \div 2.31) &= 2.2788525 \end{aligned}$$

In the same manner as before the number corresponding to this logarithm is found to be 190.043.

Example 2: Divide 2.31 by 439.

In this instance the characteristic of 2.31 is less than that of 439. It becomes necessary to add to the characteristic of the logarithm of the former the unit of 10, subtracting it at the same time, as when changing a negative to a positive characteristic.

Log of 2.31	$= 10.3636120 - 10$
Log of 439	$= 2.6424645$
Log (2.31 ÷ 439)	$= 7.7211475 - 10$

Bearing in mind that this is a negative characteristic of 3, the decimal point in the number is followed by two ciphers. The number corresponding to this logarithm is .005261959.

USE OF LOGARITHMS TO FIND ROOTS OR POWERS.—In obtaining the root of a number or the power of a number, find the logarithm of the number and multiply the logarithm by the exponent or divide by the root as the case may be. Then find the number corresponding to the logarithm thus obtained.

USE OF LOGARITHMS WHEN ANNUITY OR COMPOUND INTEREST TABLES ARE NOT AVAILABLE.—When regular annuity or compound interest tables are not available or fail to give the information needed, recourse must be had to logarithms. When large sums of money are involved tables giving accurate results are a prime necessity.

Example: Find the amount of money on deposit at the end of 10 years when an initial deposit of $2,500 has been made. Interest is payable at the rate of 4% per annum compounded quarterly.

This makes the interest rate per quarter 1%. There will be 40 such quarterly periods of compounding. To express such a statement it is written as $(1 + .01)^{40}$. That is, each $1 will earn $.01 each quarter, the amount to be compounded will, therefore, be $1.01 per quarter for each dollar. As there are 40 quarterly periods, $1.01 is to be taken as a factor 40 times. $2,500 times this will give the required answer. Such multiplication by long-hand method would require a prohibitive amount of time, but by the use of logarithms it is made simple.

Log 1.01	$= .0043214$
	$\times \quad 40$
Log $(1.01)^{40}$	$= .1728560$
Log 2,500	$= 3.3979400$
	3.5707960

The number corresponding to this logarithm is

$3,722.168 or $3,722.17

WHERE LOGARITHMS CAN AND CANNOT BE USED.—From the nature of exponents, it is evident that computations, a large part of which are made up of addition or subtraction, are not adapted to the use of logarithms unless the multiplication, division or powers included are of sufficient magnitude to warrant the use of logarithms for those parts. It must be remembered, moreover, that addition and subtraction of numbers cannot be done by logarithms

The Slide Rule

ITS USE.—An executive will find in the slide rule a useful and time-saving device By its use various calculations such as percentages, multiplication, division, etc., can be solved with a minimum of mental effort and in less time than is possible with the ordinary methods of performing such computations. The slide rule has the advantage of compactness and in many ways is superior to many tables which might be consulted.

A **manual of instructions** accompanies every slide rule and in it will be found complete diagrams and full explanations permitting the operator to perform all manner of computations.

The 10-inch slide rule gives results which are accurate to 3 or even 4 significant figures. The use of a 20-inch rule will give a higher degree of accuracy.

THE MERCHANT'S SLIDE RULE.—For the business man who is not interested in the computations of problems necessary for the engineer or technical man, a special merchant's slide rule has been devised by Keuffel & Esser Co., of New York.

The operation of the merchant's slide rule does not require a special knowledge of mathematics other than that of decimal fractions, even though the principle on which the slide rule operates is based on the theory of logarithms.

DESCRIPTION OF THE MERCHANT'S SLIDE RULE AND HOW TO USE IT.—The merchant's slide rule is double-faced with 4 scales on the face of the rule designated DF, CF, C and D, as shown in Fig. 1 and two scales C1 and D on the reverse side. As nearly all computations may be performed on scale C and D, a description of these only will be given here.

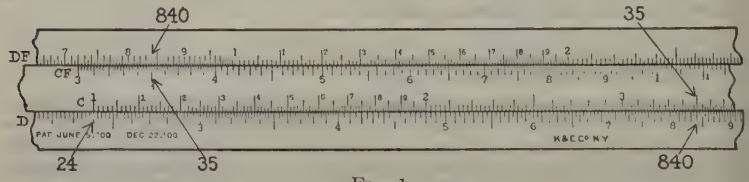

Fig. 1

MULTIPLICATION.—The use of the slide rule for multiplication can be shown by the following example. Multiply 24 by 35. Set the figure 1 at the extreme left of the movable scale C on 24 on the fixed scale D. Next move the slide along scale C until the hair line is directly over 35 on scale C. Read the result directly underneath on scale D. It will be found to be 840. By one setting 24 may be multiplied by an indefinite number of multipliers provided that they can be set on scale C. When the multiplier on scale C no longer appears opposite a number on scale D, it becomes necessary to set the figure 1 at the extreme right of the movable slide C on 24 on the fixed scale. Then proceed as before. A special device is employed on this type of slide rule which obviates the need for this change. It is, however, easily made and requires no mental effort to remember.

DIVISION.—The use of the slide rule for division can be shown by the following example. Divide 725 by 25. Set the slider over the dividend 725 on scale D. Then bring the divisor 25 on scale C, to coincide with the dividend 725 on scale D. Read the number on scale D directly under the figure 1 on scale C. In this illustration the quotient is 29. (Fig 2).

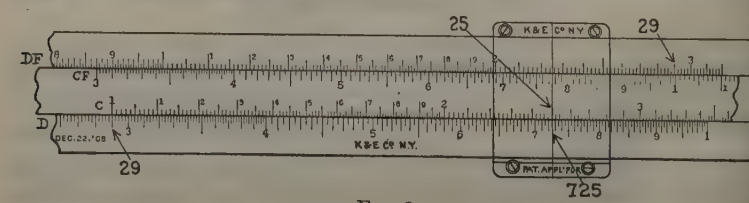

Fig. 2

It will be noted that the numbers beginning at the left of scales C and D may be read as 10, 11, 12 and so on, or they may be considered as 1.0, 1.1, 1.2. The ordinary rules for decimal points will determine this.

Ratio and Proportion

RATIO DEFINED.—The ratio of one number to another is the **quotient** obtained by dividing the first by the second. The ratio is expressed either as a fraction, such as 2/3, or by placing a colon between the numbers as 2 : 3.

PROPORTION DEFINED.—When two ratios are equal in numerical value they form a proportion. For example, 2 : 3 = 8 : 12.

MEANS AND EXTREMES OF A PROPORTION.—The extreme terms, 2 and 12, are called the **extremes.** The second and third terms are called the **means.** Given any three terms of a proportion the fourth can readily be found.

RULE FOR COMPUTING PROPORTIONS.—The rule for dividing a number in proportion to a given series of numbers is to divide the number by the sum of the numbers in the series and then multiply the quotient by each number of the series.

PRACTICAL USE OF RATIOS AND PROPORTIONS.—Practical applications of ratios and proportions are frequently found in business. One of the most common is in the distribution of net profits among partners.

Example: A partnership has net earnings for the year amounting to $136,500 which is to be distributed among the three partners in the ratio of 2, 3, 8.

The sum of this series is 13.
Dividing $136,500 by 13 gives $10,500.
Multiplying by the numbers in the series the distribution of profit is as follows:

$$2 \times 10{,}500 = \$21{,}000$$
$$3 \times 10{,}500 = \$31{,}500$$
$$8 \times 10{,}500 = \$84{,}000$$
$$\text{Total} \ldots\ldots \$136{,}500$$

Progressions

ARITHMETICAL PROGRESSIONS.—A progression is a sequence of terms which proceed according to some fixed law. An arithmetical progression is a sequence of numbers, the difference between any two consecutive terms of which is constant. Thus 3, 6, 9, 12, 15, etc., is an arithmetical progression, the difference between any two consecutive terms being 3.

In an **increasing arithmetical progression** the difference is positive and in a **decreasing one** it is negative.

ARITHMETICAL FORMULAS AND THEIR USES.—If we represent the first term by a, the common difference by d, the number of terms by n, and the last term of an arithmetical progression by l, then the last term can be found from the formula:

$$l = a + (n-1)d$$

The sum of the terms in such a progression is obtained by means of the formula:

$$\text{Sum } (s) = \frac{n(a+l)}{2}$$

When any three of the factors of an arithmetical progression are known, the others may be found by use of the two formulas.

Example: To find the sum of 7 terms of the arithmetical progression 7, 15, 23, 31, etc.

Substitute in the formulas above $a = 7$, $d = 8$, $n = 7$; $l = 7 + (7 - 1)8$, $l = 55$; $s = \frac{7(7 + 55)}{2} = 217$.

GEOMETRIC PROGRESSION.—A geometric progression is a sequence of terms in which each term except the first is obtained by multiplying the term immediately preceding by a fixed quantity known as the geometric ratio. Thus 6, 18, 54, 162 is a geometric progression with a ratio of 3.

GEOMETRIC FORMULAS AND THEIR USES.—As before, let a represent the first term, l the last term, n the number of terms, and r the ratio, then the formula for the last term of a geometrical progression becomes:

$$l = ar^{n-1}$$

The formula for obtaining the sum of the terms is the following:

$$s = \frac{ar^n - a}{r - 1} \text{ or } \frac{rl - a}{r - 1}$$

The use of such a formula is shown in the following illustration: Find the sum to 6 terms of the geometrical progression: 3, 6, 12, 24. Substitute the values in the formula which results in

$$s = \frac{3(2)^6 - 3}{2 - 1} = \frac{192 - 3}{1} = 189.$$

Percentage of Profit Based on Selling Price

The selling price of goods when certain factors are known can be readily obtained through the use of the formula or a table (Table 18). These factors are:

1. Cost of goods.
2. Per cent cost of doing business based on selling price.
3. Per cent of net profit desired based on selling price.

The table gives the selling price factor and has been derived from the formula

$$S.\ P.\ \text{factor} = \frac{1}{1 - (C + P)}$$

where C = per cent cost on sales of doing business
P = per cent net profit on sales desired.

Example: What should the selling price of an article be when its cost is \$22, the desired percentage of net profit on sales is 20%, and the percentage cost of doing business on sales is 25%. Referring to column headed 25% on the line 20%, we find the factor 1.818. Multiply \$22 by 1.818 to give the selling price which is \$40.

PROOF:

Cost of doing business 25% of \$40	\$10
Per cent profit desired 20% of \$40	8
Cost of goods	22
Selling price	\$40

Table 18. Selling Price Factor on Cost

Per cent of Net profit Desired	PER CENT COST TO DO BUSINESS															
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	1.124	1.136	1.149	1.163	1.176	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351
2	1.136	1.149	1.163	1.176	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370
3	1.149	1.163	1.176	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389
4	1.163	1.176	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408
5	1.176	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429
6	1.190	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429	1.449
7	1.205	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429	1.449	1.471
8	1.220	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429	1.449	1.471	1.493
9	1.235	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429	1.449	1.471	1.493	1.515
10	1.250	1.266	1.282	1.299	1.316	1.333	1.351	1.370	1.389	1.408	1.429	1.449	1.471	1.493	1.515	1.538
12½	1.290	1.307	1.324	1.342	1.361	1.379	1.399	1.418	1.439	1.460	1.481	1.503	1.527	1.550	1.575	1.600
15	1.333	1.351	1.370	1.389	1.408	1.429	1.449	1.471	1.493	1.515	1.538	1.563	1.587	1.613	1.639	1.667
16⅔	1.364	1.382	1.402	1.422	1.442	1.463	1.485	1.508	1.531	1.554	1.579	1.604	1.630	1.657	1.685	1.714
18	1.389	1.408	1.429	1.449	1.471	1.493	1.515	1.538	1.563	1.587	1.613	1.639	1.667	1.695	1.724	1.754
20	1.429	1.449	1.471	1.493	1.515	1.538	1.563	1.587	1.613	1.639	1.667	1.695	1.724	1.754	1.786	1.818
25	1.538	1.563	1.587	1.613	1.639	1.667	1.695	1.724	1.754	1.786	1.818	1.852	1.887	1.923	1.961	2.000
30	1.667	1.695	1.724	1.754	1.786	1.818	1.852	1.887	1.923	1.961	2.000	2.041	2.083	2.128	2.174	2.222
33⅓	1.765	1.796	1.829	1.863	1.899	1.935	1.974	2.013	2.055	2.098	2.143	2.190	2.239	2.290	2.344	2.400

Standard Values of Foreign Coins

Country	Legal standard	Monetary unit		U. S. money	Remarks
Argentine Republic	Gold	Peso		$0.9648	Currency: Paper, normally convertible at 44 per cent of face value; now inconvertible.
Austria	Gold	Schilling		.1407	
Belgium	Gold and silver	Franc		.1930	Member Latin Union; gold is actual standard.
Bolivia	Gold	Boliviano		.3893	12½ bolivianos equal 1 pound sterling.
Brazil	Gold	Milreis		.5462	Currency: Government paper normally convertible at 16 pence (=$0.3244) per milreis.
British Cols. in Australasia and Africa	Gold	Pound sterling		4.8665	
British Honduras	Gold	Dollar		1.0000	
Bulgaria	Gold	Lev		.1930	
Canada	Gold	Dollar		1.0000	
Chile	Gold	Peso		.3650	Currency: Inconvertible paper.
China	Silver	Tael	Amoy	.8318	The tael is a unit of weight; not a coin. The customs unit is the Haikwan tael. The values of other taels are based on their relation to the value of the Haikwan tael.
			Canton	.8293	
			Cheefoo	.7955	
			Chin Kiang	.8125	
			Fuchau	.7694	
			Haikwan (customs)	.8463	
			Hankow	.7782	
			Kiaochow	.8060	
			Nankin	.8237	
			Niuchwang	.7800	
			Ningpo	.7997	
			Peking	.8109	
			Shanghai	.7598	
			Swatow	.7683	
			Takau	.8370	
			Tientsin	.8060	
			Yuan	.5390	The Yuan silver dollar of 100 cents is the monetary unit of the Chinese Republic; it is equivalent to .644+ of the Haikwan tael.
		Dollar	Hongkong	.5471	
			British	.5471	
			Mexican	.5511	Mexican silver pesos issued under Mexican decree of Nov. 13, 1918, are of silver content approximately 41% less than dollar here quoted; those issued under decree of Oct. 27, 1919, contain about 51% less silver.
Colombia	Gold	Peso		.9733	Currency: Government paper and gold.
Costa Rica	Gold	Colon		.4653	
Cuba	Gold	Peso		1.0000	
Czechoslovakia	Gold	Krone		.2026	

Denmark	Gold	Krone	.2680	
Ecuador	Gold	Sucre	.4867	
Egypt	Gold	Pound (100 piasters)	4.9431	British pound sterling is legal tender for 97½ piasters.
Finland	Gold	Markka	.1930	
France	Gold and silver	Franc	.1930	Member Latin Union; gold is actual standard.
Germany	Gold	Reichsmark	.2382	
Great Britain	Gold	Pound sterling	4.8665	
Greece	Gold and silver	Drachma	.1930	Member Latin Union; gold is actual standard.
Guatemala	Silver	Peso	.5074	Currency: Inconvertible paper.
Haiti	Gold	Gourde	.2000	Currency: Inconvertible paper.
Honduras	Silver	Peso	.5074	Currency, bank notes.
India [British]	Gold	Mohur and sovereign	4.8665	The British sovereign and half sovereign are legal tender in India at 10 rupees per sovereign.
	Silver	Rupee	.2411	
Indo-China	Silver	Piaster	.5480	
Italy	Gold	Lira	.1930	Member Latin Union; gold is actual standard.
Japan	Gold	Yen	.4985	
Jugoslavia	Gold	Dinar	.1930	
Liberia	Gold	Dollar	1.0000	Currency: Depreciated silver token coins.
Mexico	Gold	Peso	.4985	
Netherlands	Gold	Guilder (florin)	.4020	
Newfoundland	Gold	Dollar	1.0000	
Nicaragua	Gold	Cordoba	1.0000	
Norway	Gold	Krone	.2680	
Panama	Gold	Balboa	1.0000	
Paraguay	Gold	Peso (Argentine)	.9648	Currency: Depreciated Paraguayan paper currency.
Persia	Silver	Kran	.0934	Currency: Silver circulating above its metallic value.
Peru	Gold	Libra	4.8665	
Philippine Islands	Gold	Peso	.5000	
Poland	Gold	Zloty	.1930	
Portugal	Gold	Escudo	1.0805	Currency: Inconvertible paper.
Rumania	Gold	Leu	.1930	
Russia	Gold	Chervonetz	5.1460	
Salvador	Gold	Colon	.5000	
Santo Domingo	Gold	Dollar	1.0000	
Serbia	Gold	Dinar	.1930	
Siam	Gold	Tical	.3709	
Spain	Gold and silver	Peseta	.1930	Valuation is for gold peseta; currency is notes of the bank of Spain.
Straits Settlements	Gold	Dollar	.5678	
Sweden	Gold	Krona	.2680	
Switzerland	Gold	Franc	.1930	Member Latin Union; gold is actual standard.
Turkey	Gold	Piaster	.0440	(100 piasters equal to the Turkish £.)
Uruguay	Gold	Peso	1.0342	Currency: Inconvertible paper.
Venezuela	Gold	Bolivar	.1930	

Shillings and Pence Expressed in Decimals of a Pound

Shillings	PENCE											
	0	1	2	3	4	5	6	7	8	9	10	11
0	—	.00417	.00833	.01250	.01667	.02083	.02500	.02917	.03333	.03750	.04167	.04583
1	.05000	.05417	.05833	.06250	.06667	.07083	.07500	.07917	.08333	.08750	.09167	.09583
2	.10000	.10417	.10833	.11250	.11667	.12083	.12500	.12917	.13333	.13750	.14167	.14583
3	.15000	.15417	.15833	.16250	.16667	.17083	.17500	.17917	.18333	.18750	.19167	.19583
4	.20000	.20417	.20833	.21250	.21667	.22083	.22500	.22917	.23333	.23750	.24167	.24583
5	.25000	.25417	.25833	.26250	.26667	.27083	.27500	.27917	.28333	.28750	.29167	.29583
6	.30000	.30417	.30833	.31250	.31667	.32083	.32500	.32917	.33333	.33750	.34167	.34583
7	.35000	.35417	.35833	.36250	.36667	.37083	.37500	.37917	.38333	.38750	.39167	.39583
8	.40000	.40417	.40833	.41250	.41667	.42083	.42500	.42917	.43333	.43750	.44167	.44583
9	.45000	.45417	.45833	.46250	.46667	.47083	.47500	.47917	.48333	.48750	.49167	.49583
10	.50000	.50417	.50833	.51250	.51667	.52083	.52500	.52917	.53333	.53750	.54167	.54583
11	.55000	.55417	.55833	.56250	.56667	.57083	.57500	.57917	.58333	.58750	.59167	.59583
12	.60000	.60417	.60833	.61250	.61667	.62083	.62500	.62917	.63333	.63750	.64167	.64583
13	.65000	.65417	.65833	.66250	.66667	.67083	.67500	.67917	.68333	.68750	.69167	.69583
14	.70000	.70417	.70833	.71250	.71667	.72083	.72500	.72917	.73333	.73750	.74167	.74583
15	.75000	.75417	.75833	.76250	.76667	.77083	.77500	.77917	.78333	.78750	.79167	.79583
16	.80000	.80417	.80833	.81250	.81667	.82083	.82500	.82917	.83333	.83750	.84167	.84583
17	.85000	.85417	.85833	.86250	.86667	.87083	.87500	.87917	.88333	.88750	.89167	.89583
18	.90000	.90417	.90833	.91250	.91667	.92083	.92500	.92917	.93333	.93750	.94167	.94583
19	.95000	.95417	.95833	.96250	.96667	.97083	.97500	.97917	.98333	.98750	.99167	.99583

The Metric System

The metric system of weights and measures is based on the decimal system. It is in use in nearly all civilized countries. The United States and England are exceptions. It was officially adopted by the United States in 1866 but is as yet used only in scientific work. All units of measure and weight are based on the **meter**, which is the fundamental unit of the system. It is equal to one ten-millionth of the distance from the equator to the pole, or 39.37 in.

Linear Measure

10 millimeters (mm.)	= 1 centimeter (cm.)
10 centimeters	= 1 decimeter (dm.)
10 decimeters	= 1 **meter** (m.)
10 **meters**	= 1 decameter (Dm.)
10 decameters	= 1 hectometer (Hm.)
10 hectometers	= 1 kilometer (Km.)
10 kilometers	= 1 myriameter (Mm.)

Square Measure

100 square millimeters (sq. mm.)	= 1 square centimeter (sq. cm.)
100 square centimeters	= 1 square decimeter (sq. dm.)
100 square decimeters	= 1 **square meter** (sq. m.)
100 **square meters**	= 1 square decameter (sq. Dm.)
100 square decameters	= 1 square hectometer (sq. Hm.)
100 square hectometers	= 1 square kilometer (sq. Km.)

Land Measure

100 centares (ca.)	= 1 are (a.)	= 100 sq. m.
100 ares	= 1 hectare (Ha.)	= 10,000 sq. m.

Cubic Measure

1,000 cubic millimeters (cu. mm.)	= 1 cubic centimeter (cu. cm.)
1,000 cubic centimeters	= 1 cubic decimeter (cu. dm.)
1,000 cubic decimeters	= 1 cubic meter (cu. m.)

Wood Measure

10 decisteres (ds.)	= 1 stere (s.)	= 1 cu. m.
10 steres	= 1 decastere (Ds.)	= 10 cu. m.

Measure of Capacity

10 milliliters (ml.)	= 1 centiliter (cl.)
10 centiliters	= 1 deciliter (dl.)
10 deciliters	= 1 liter (l.)
10 liters	= 1 decaliter (Dl.)
10 decaliters	= 1 hectoliter (Hl.)
10 hectoliters	= 1 kiloliter (Kl.)

The liter is used for measuring liquids in ordinary quantities.
The centiliter or milliliter is used for measuring liquids in minute quantities.
The hectoliter is used for measuring grain and vegetables.

Measure of Weight

10 milligrams (m.g.)	= 1 centigram (cg.)
10 centigrams	= 1 decigram (dg.)
10 decigrams	= 1 gram (g.)
10 grams	= 1 decagram (Dg.)
10 decagrams	= 1 hectogram (Hg.)
10 hectograms	= 1 kilogram (Kg.)
10 kilograms	= 1 myriagram (Mg.)
10 myriagrams	= 1 quintal (Q.)
10 quintals	= 1 tonneau (T.)

The gram is the unit of weight. It is the weight of 1 cu. cm. of distilled water in a vacuum, at its greatest density (39.2° F.). It is equivalent to 15.4324 gr.

The gram is used to weigh drugs, letters, etc.

The kilogram is used to weigh merchandise; in large quantities the quintal and tonneau are used.

Tables of Equivalents

The following tables give equivalent values of both English and metric systems:

Linear Measure

1 inch	= 2.54 centimeters	1 centimeter	= .3937 of an inch
1 foot	= .3048 of a meter	1 decimeter	= .328 of a foot
1 yard	= .9144 of a meter	1 meter	= 1.0936 yards
1 rod	= 5.029 meters	1 decameter	= 1.9884 rods
1 mile	= 1.6093 kilometers	1 kilometer	= .62137 of a mile

Surface Measure

1 sq. inch	= 6.452 sq. centimeters	1 sq. centimeter	= .155 of a sq. inch
1 sq. foot	= .0929 of a sq. meter	1 sq. decimeter	= .1076 of a sq. foot
1 sq. yard	= .8361 of a sq. meter	1 sq. meter	= 1.196 sq. yards
1 sq. rd.	= 25.293 sq. meters	1 are	= 3.954 sq. rods
1 acre	= 40.47 ares	1 hectare	= 2.471 acres
1 sq. mile	= 259 hectares	1 sq. kilometer	= .3861 of a sq. mile

Cubic Measure

1 cu. inch	= 16.387 cu. centimeters	1 cu. centimeter	= .061 of a cu. inch
1 cu. foot	= 28.317 cu. decimeters	1 cu. decimeter	= .0353 of a cu. foot
1 cu. yard	= .7646 of a cu. meter	1 cu. meter	= 1.308 cu. yards
1 cord	= 3.624 steres	1 stere	= .2759 of a cord

Measures of Capacity

1 dry quart	= 1.101 liters	1 liter	= .908 of a dry quart
1 liquid quart	= .9463 of a liter	1 liter	= 1.0567 liquid qt.
1 liquid gallon	= .3785 of a decaliter	1 decaliter	= 2.6417 liquid gal.
1 peck	= .881 of a decaliter	1 decaliter	= 1.135 pecks
1 bushel	= .3524 of a hectoliter	1 hectoliter	= 2.8377 bushels

Measures of Weight

grain, troy	= .0648 of a gram	1 gram	= 15.432 grains, troy
ounce, troy	= 31.104 grams	1 gram	= .03215 of an oz., troy
ounce, avoir.	= 28.35 grams	1 gram	= .03527 of an oz., avoir.
lb., troy	= .3732 of a kilogram	1 kilogram	= 2.679 lb., troy
lb., avoir.	= .4536 of a kilogram	1 kilogram	= 2.2046 lb., avoir.
ton (short)	= .9072 of a tonneau or ton	1 tonneau	= 1.1023 tons (short)

Convenient Equivalent Values

cu. cm. of water = 1 ml. of water, and weighs 1 gram = 15.432 gr.
cu. dm. of water = 1 l. of water, and weighs 1 Kg. = 2.2046 lb.
cu. m. of water = 1 Kl. of water, and weighs 1 tonneau = 2204.6 lb.

Practical Measurements and Tables

Linear Measure

Linear measures are employed in measuring distance and length.

12	inches (in.)	= 1 foot (ft.)
3	feet	= 1 yard (yd.)
$5\frac{1}{2}$	yards, or $16\frac{1}{2}$ feet	= 1 rod (rd.)
320	rods, or 5,280 feet	= 1 mile (mi.)

Sometimes the signs (′) and (″) are used in place of ft. and in., contractions for feet and inches. Thus, 3′ 4″ instead of 3 ft. 4 in.

Square Measure

Square measure is used in measuring surfaces.

144	square inches (sq. in.)	= 1 square foot (sq. ft.)
9	square feet	= 1 square yard (sq. yd.)
$30\frac{1}{4}$	square yards	= 1 square rod (sq. rd.)
160	square rods	= 1 acre (A)
640	acres	= 1 square mile (sq. mi.)
1	acre = 4,840 sq.yds.	= 43,560 sq. ft.

Cubic Measure

Cubic measure is used in measuring volumes.

1,728 cubic inches (cu. in.)	= 1 cubic foot (cu. ft.)
27 cubic feet	= 1 cubic yard (cu. yd.)
128 cubic feet	= 1 cord (cd.)

Dry Measure

2 pints (pt.)	= 1 quart (qt.)
8 quarts	= 1 peck (pk.)
4 pecks	= 1 bushel (bu.)

Liquid Measure

2 pints = 1 quart
4 quarts = 1 gallon
63 gallons = 1 hogshead (hhd.)

A standard bushel contains 2,150.42 cubic inches.
A heaped bushel contains 2,747.715 cubic inches.

Avoirdupois Weight

16 ounces (oz.) = 1 pound (lb.)
2,000 pounds = 1 ton (T.)

Grain and Seeds

The number of pounds in a bushel of the following commodities are given below as used in most states of the United States. These weights are not, however, uniform in all states.

Corn (shelled)	56 lb.	Flaxseed	56 lb.
Corn on cob	70 "	Cloverseed	60 "
Corn (in husk or shuck)	72 "	Beans	60 "
Wheat	60 "	Bran	20 "
Oats	32 "	Peas	60 "
Rye	56 "	Timothy seed	45 "
Barley	48 "	Corn meal	48 "
		Potatoes	60 "

Paper

25 sheets = 1 quire (qr.)
20 quires = 1 ream (rm.)
2 reams = 1 bundle (bdl.)
5 bundles = 1 bale (bl.)

Some paper mills use 480 sheets to the ream, instead of 500.

Troy Weight

24 grains (gr.) = 1 pennyweight (pwt.)
20 pennyweight = 1 ounce (oz.)
12 ounces = 1 pound (lb.)

Troy weight is used in weighing precious metals. The standard is the troy pound, containing 5,760 grains. The avoirdupois pound contains 7,000 grains. The amount of pure gold in an article is expressed in carats, 24 units being the standard. Eighteen carats means 18/24, or $\frac{3}{4}$ pure gold and 6/24, or $\frac{1}{4}$ alloy. In weighing diamonds the carat is 3 1/6 grains.

1 Assay Ton = 29,167 milligrams

or as many milligrams as there are troy ounces in a ton of 2,000 lb. avoirdupois. Consequently, the number of milligrams of precious metal yielded by an assay ton of ore gives directly the number of troy ounces that would be obtained from a ton of 2,000 pounds avoirdupois.

Apothecaries' Weight

20 grains (gr.) = 1 scruple (℈)
3 scruples = 1 dram (ʒ)
8 drams = 1 ounce (℥)
12 ounces = 1 pound (lb.)

Decimal Equivalent of Fractions

Fraction	Decimal	Fraction	Decimal
1/64 =	.015625	1/4 =	.25000
1/32 =	.031250	3/8 =	.37500
1/16 =	.06250	1/2 =	.50000
1/12 =	.08333	5/8 =	.62500
1/8 =	.12500	3/4 =	.75000
1/6 =	.16667	7/8 =	.87500

WEIGHTS AND MEASURES OF VARIOUS COUNTRIES.—There are general use throughout the world, **two main systems** of weights and measures. hese are the **metric system** and the **English system.** The system in use in the nited States is the English system with slight modifications.

The following tables have been compiled from data furnished by the Bureau Commerce, Washington, D.C.

COUNTRIES WHICH USE THE METRIC SYSTEM.—Countries in which e metric system is in common use or has been made the standard by law are e following:

Africa:
- French Africa
- Italian Africa
- Congo
- Algeria
- Madagascar
- Tripoli
- Portuguese West Africa
- Tunis

Asia:
- French Indo China
- Dutch East Indies
- Japan
- Siam

Central America:
- All Central America use the metric system except British Honduras.

Europe:
- Austria
- Czechoslovakia
- Denmark
- Finland
- France
- Germany
- Greece
- Italy
- Netherlands
- Norway
- Portugal
- Rumania
- Russia
- Servia
- Spain
- Sweden

Europe—(Continued)
Switzerland
Turkey
North America:
Mexico alone of the three North American countries uses the metric system.
Oceania:
Samoa
Society Islands
Java
Philippine Islands
South America:
The metric system is in use throughout all the countries on this continent with the exception of British Guiana.

COUNTRIES WHICH USE THE ENGLISH SYSTEM OF WEIGHTS AND MEASURES.—The countries which use the English system are: dependencies of Great Britain—Australia, New Zealand, British Honduras, British Guiana, British West Indies, Canada, Great Britain, British possessions in Africa, Malta, British India, Ceylon, parts of China, Straits Settlements, and Zanzibar.

COUNTRIES WHICH USE A MODIFIED ENGLISH SYSTEM OF WEIGHTS AND MEASURES.—A modified English system is also used in those countries which are more or less closely associated with the United States. These are Porto Rico, Panama, Liberia, Philippine Islands. The metric system, however, is used in these countries to an even greater degree than the modified English system.

LOCAL SYSTEMS OF WEIGHTS AND MEASURES OF VARIOUS COUNTRIES.—Some countries use in addition to the two main systems mentioned above, **local systems** of their own. When exporting to or importing from the following countries it may be well to have in mind that the natives frequently use the weights and measures in the following table, which, however, contains only the more important units.

Local Systems of Weights and Measures

	Unit	U. S. Equiv.
ASIA		
rabia	Farasla (coffee)	35 lb.
	Kandi (grain)	672 lb.
	Maund	28 lb.
ritish India	Tola	.4114 oz.
	Ser	2.057 lb.
	Imperial Maund	82 2/7 lb.
	Bombay Maund	28 lb.
	Madras Maund	26 lb.
eylon	Parah	.7224 bu.
hina	Catty	1⅓ lb.
	Picul	133⅓ lb.
	Bale (silk)	106.62 lb.
utch East Indies	Catty	1.36 lb.
	Picul	136 lb.
apan	Tsubo	3.954 sq. yd.
	Koku (liquid)	47.654 gal.
	Koku (dry)	5.119 bu.
	Kwan	8.267 lb.
	Kin	1.32277 lb.
alestine	Jarra (oil)	7.80 gal.
(North)	Kantar	565.259 lb.
(South)	"	637.017 lb.
	Okka	2.827 lb.
	Saa	2.3377 gal.
ersia	Miskal	.010229 lb.
	Tabriz	6.547 lb.
	Kharwar	654.7 lb.
	Zar	40.95 in.
iam	Catty	2⅔ lb.
	Picul	133⅓ lb.
raits Settlements	Tahil	1⅓ oz.
	Catty	1⅓ lb.
	Picul	133⅓ lb.
AFRICA		
byssinia	Farasula (coffee and wax)	37.125 lb.
	Kantar	99 lb.
	Pike	27 in.
ritish possessions	Long ton	2240 lb.
	Short ton	2000 lb.
	Leaguer	153.64 gal.
	Muid	3.0945 bu.
	Anker	9.307 gal.
gypt	Rottle	.990492 lb.
	Oke	2.7514 lb.
	Cantar	99.0492 lb.
	Ardeb (liq.)	52.30575 gal.
	Ardeb (dry)	5.6187298 bu.
	Diraa baladia (fabrics)	22.8346 in.
	Pic	29.52756 in.
orocco	Attari	1.12 lb.
	Draa (Tangier)	18.5 in.
unis	Cantar	111.1 lb.
anzibar	Frasila	35 lb.

	Unit	U. S. Equiv.
EUROPE		
Azores (See Portugal)		
Czechoslovakia	Quintal	220.462 lb.
Denmark	Prend	1.1023 lb.
	Fod	1.029 ft.
	Alen	2.059 ft.
	Tonde	3.9479 bu.
	Pot	.2552 gal.
Esthonia	Arshien	28 in.
	Garnts	2.980 qt.
	Lorkat	21 in.
	Pood	36.13 lb.
	Shtoff	.406 gal.
Greece	Oke	2.8215 lb.
	Pike	27 in.
	Kile	1.07 bu.
	Venetian pound	1.05 lb.
Hungary	Mazsa	220.46 lb.
Italy	Caffiso	5.4 gal.
	Salma	480 lb.
	Cantar	175 lb.
Jugo Slavia	Arshin	2.185 ft.
	Oka	2.826 lb.
	Oka	1.479 qt.
Netherlands	Maatje (dry)	.181 pt.
	Schepel	1.135 pk.
Portugal	Libra	1.012 lb.
	Almude (Lisbon)	4.369 gal.
	Almude (Oporto)	6.626 gal
Poland	Funt	.9 lb.
	Pood	36 lb.
Rumania	Oke	1.078 qt.
Russia	Arshine	28 in.
	Funt	.90282 lb.
	Pood	36.1128 lb.
	Vedro	3.249 gal.
	Chetvert	5.9568 bu.
Spain	Libra	1.0143 lb.
	Arroba	25.358 lb.
	Quintal	101.433 lb.
	Tonelada	2028.66 lb.
	Celenin	.525 pt.
	Fanega	1.57495 bu.
	Cahiz	18.899 bu.
	Azumbre	2.13 qt.
	Cantara	4.2605 gal.
	Moyo	66.0553 gal.
	Arroba (oil)	3.3187 gal.
	Linea	.07618 in.
	Pulgada	.91425 in.
	Pie	10.9711 in.
	Vara	32.9133 in.
Turkey	Oke	2 81857 lb.
	Kile	1.10 bu.
	Pic	27 in.

Local Systems of Weights and Measures—(Continued)

	Unit	U. S. Equiv.
United Kingdom	Gallon	1.20009 gal.
	Bushel	1.03205 bu.
	Hundredweight	112 lb.
	Quarter	28 lb.
	Stone	14 lb.
	Ton	2240 lb.
SOUTH AMERICA		
Argentine	Arroba	25.32 lb.
	Pesada (salted hides)	60.768 lb.
Bolivia	Vara	32.91 in.
	Arroba	25.36 lb.
	" (dry)	.864 bu.
	" (liquid)	4.261 gal.
Brazil	Libra	1.012 lb.
	Arroba	32.38 lb.
Chile	Vara	32.91 in.
	Quintal	101.41 lb.
	Arroba	25.36 lb.
Colombia	Vara	33.38 in.
	Libra	1.014 lb.
	Arroba	25.36 lb.
Dutch Guiana	Foot	$12\frac{3}{5}$ in.
	Ell	$27\frac{1}{8}$ in.
Ecuador	Quintal	101.4 lb.
	Libra	1.014 lb.
	Vara	33 in.
	Arroba	25.36 lb.
Paraguay	Vara	33.01 in.
	Quintal	101.4 lb.
Peru	Vara	32.91 in.
	Arroba	25.36 lb.
	Libra	1.014 lb.
Venezuela	Vara	33.38 in.
	Arroba	25.402 lb.
CENTRAL AMERICA		
Costa Rica	Vara	33 in.
	Arroba	25.36 lb.
	Quintal	101.4 lb.
Guatemala	Vara	32.87 in.
	Arroba	25.36 lb.
Honduras	Vara	37 in.
	Arroba	25.36 lb.
Nicaragua	Vara	33 in.
	Arroba	25.36 lb.
Salvador	Vara	33 in.
	Arroba	25.36 lb.
WEST INDIES		
Cuba	Vara	33.384 in.
	Arroba	25.366 lb.
Dominican Republic	Quintal	101.4 lb.
	Vara	32.91 in.
	Arroba	25.35 lb.
Haiti	Pound	1.1023 lb.
	Ton	2000 lb.
	Gallon	Gallon

Depreciation

DEPRECIATION DEFINED.—Depreciation is a decline in value of property as a result of **wear and tear** and gradual **obsolescence.**

The purpose of this section is not to discuss the theory of depreciation nor its application to assets but rather to consider briefly the methods of computing depreciation.

CAUSES OF DEPRECIATION.—

1. Wear and tear through use
2. Action of the elements
3. Inadequacy
4. Obsolescence
5. Accident

Wear and tear through use occurs during operation. Even though the moving parts of a machine are kept constantly repaired and oiled those parts wear out. Likewise a building gradually decays even if it is painted with regularity.

Rusting of iron, corrosion of metals, and decay of wood, are examples of the cause of depreciation through the **action of the elements.**

Inadequacy is the inability of an asset to perform its work in a satisfactory or efficient manner. This may be due to new developments, changes in policy or to lack of capacity to meet increased demands for production.

Obsolescence occurs when an asset can no longer compete with more efficient machinery. Obsolescence is primarily brought about by new inventions.

Accident is an injury occurring to an asset through unavoidable causes or

rough carelessness during operation. It is frequently included under the ading of wear and tear.

BASES FOR COMPUTING DEPRECIATION.—All computations of de-ciation are based upon one or more of the following factors:

1. Original cost of the asset
2. Scrap or residual value
3. Life of the asset in time or units produced
4. Arbitrary interest rate

The **original cost** of the asset includes not only the purchase price but also cost of placing the asset in service, including freight and expense of tallation. The **scrap or residual value** is the estimated value that may be tained for the asset at the end of its useful life. This value includes cost of noval and breaking up. The **life of an asset** measured in time is the esti-ted number of years that it can be operated efficiently. This time may in fiscal periods or working hours. The life of the asset is frequently asured in units produced. Such units may be tons, pieces, yards, or other units.

METHODS OF COMPUTING DEPRECIATION.—There are **four general thods** of computing depreciation:

1. Proportion methods
2. Variable percentage methods
3. Compound interest methods
4. Miscellaneous methods

PROPORTION METHODS.—There are four general methods based upon assumption that the life of an asset diminishes in accordance with a fixed io: (1) straight line method; (2) working hour method; (3) composite life thod; (4) unit production method.

STRAIGHT LINE METHOD.—The straight line method is the **simplest operation,** and therefore, is most commonly used. Under this method the et is considered as wearing out evenly during its normal life and provision made for setting aside periodically a uniform amount of money regardless the fact that the asset depreciates more rapidly at some stages of its life than others. When the factor of inadequacy, obsolescence or accident is unlikely nter, this method has much to recommend it, although the additional burden repairs with a uniform rate of depreciation is likely to increase the cost of ration in later years and so penalize the operating division.

The amount of annual depreciation is obtained by dividing the initial cost the asset by the estimated life in years when the assumption is that there l be no scrap value. Should the asset have an estimated scrap value this ount will have to be deducted from the initial cost before dividing by the imated life in years.

Assuming an asset of $1,000 with a scrap value at the end of a 10-year life $100, the annual depreciation charge will be

$$\frac{(\$1{,}000 - \$100)}{10} = \$90 \text{ per annum}$$

WORKING HOUR METHOD.—The working hour method is similar to the ight line method with the exception that the time element expressed in al periods in the latter is superseded by the service life expressed in operat-hours.

Thus, if an asset costing $1,000 has a scrap value of $100 and an operating of 9,000 hours, the depreciation would be at the rate of 10 cents per hour rated. If at the end of a year a machine has been operated 2,000 hours, the preciation for that period is $200. This method will be quite satisfactory vided that there are no inequalities in wear and tear during the different

operations performed. Under this method care must be taken to have the base or operating life in hours estimated as accurately as possible.

COMPOSITE LIFE METHOD.—The composite life method is based on the straight line method and is of value in checking computations made under that method. By the use of the composite life method the rate of depreciation determined is applied to the plant as a whole, rather than to the individual assets.

The disadvantages of the composite life method are the same as those set forth under the straight line method and in addition it gives no consideration to the individual assets.

There are two methods for determining the composite rate. The method given below is generally considered the better one.

Assets	Cost less Scrap Value	Estimated Life	Rate of Depreciation	Annual Depreciation
Trucks	$ 25,000	5 yrs.	20 %	$ 5,000.00
Factory fixtures	8,000	12	8⅓	666.67
Buildings	30,000	30	3⅓	1,000.00
Machinery	60,000	10	10	6,000.00
	$123,000		10.30%	$12,666.67

The rate of depreciation on the composite life is 10.30% per annum obtained by dividing the composite annual depreciation $12,666.67 by the composite value of the plant less scrap value, $123,000.

UNIT PRODUCTION METHOD.—The unit production method is particularly applicable to assets producing a uniform product. In determining depreciation of equipment in mines, oil wells or forests, this method is almost exclusively used. It is also used by the New York Edison Co. which bases its depreciation on the kilowatt-hours produced.

In the coal mining industry it is assumed that the coal tipple will last as long as the mine. Therefore, with the knowledge of the available ore and the cost of the tipple, the annual depreciation of the latter can be figured thus:

Estimated tonnage in the mine..... 4,000,000
Cost of tipple having no scrap value.... $250,000

	Tons Produced	Ore Reserves
Dec. 31, 1920.....	50,000	3,950,000
1921.....	150,000	3,800,000
1922.....	200,000	3,600,000
1923.....	250,000	3,350,000
1924.....	250,000	3,100,000

$$\frac{50,000}{4,000,000} \times \$250,000 = \$3,125 \text{ depreciation for 1920}$$

$$\frac{150,000}{3,950,000} \times \$246,875 = \$9,375 \text{ depreciation for 1921}$$

Each year the depreciation is based on the ratio of tonnage produced to the ore reserve at the beginning of the year, multiplied by the remaining cost of the tipple. In the last computation the tonnage produced in 1921 was 150,000. The reserve of January 1, 1921, was $3,950,000; the net book value of the asset at January 1, 1921 was $246,875, from which the charge for depreciation amounting to $9,375 was obtained.

VARIABLE PERCENTAGE METHODS.—Variable percentage methods differ from those in the preceding group in that either the base or the percentage rate varies. There are two classes: (1) fixed percentage on diminishing value; and (2) sum of expected life periods.

FIXED PERCENTAGE ON DIMINISHING VALUE.—The fixed percentage diminishing value method charges off a constant percentage on the net book lue of the asset at the beginning of the year. If the asset cost $1,000 and the te of depreciation is 20%, then the first year the depreciation will be $200, aving a net book value of $800. The second year the depreciation will be 20% $800, or $160, leaving a net book value of $640, and so on. It will be noted at each year the book value of the asset becomes less, also that the asset lue never reaches zero. As there is usually a scrap value, the balance of the sset will be cleaned out by this means.

The formula for this method is:

$$d = 100\left(1 - \sqrt[n]{\frac{S}{C}}\right)$$

where d = per cent of depreciation
s = scrap or residual value
c = cost of asset
n = estimated life of asset in years

This formula is readily solved by logarithms by methods described on page 130.

Example: Assume an asset whose original cost was $1,000 with a scrap lue of $100 and a life of 5 years. Then the formula becomes

$$d = 100\left(1 - \sqrt[5]{\frac{100}{1{,}000}}\right) = 36.9043$$

Years	Annual Depreciation	Depreciated Value or Net Book Value	Accumulated Depreciation
0	$———	$1,000.00	$———
1	369.04	630.96	369.04
2	232.85	398.11	601.89
3	146.92	251.19	748.81
4	92.70	158.49	841.51
5	58.49	100.00	900.00

It will be seen that the net book value at the close of the 5th year is the scrap alue of the asset.

SUM OF EXPECTED LIFE PERIODS METHOD.—This method differs om the one immediately preceding in that the base or book value remains nstant while the annual rate of depreciation changes. This variable rate is btained in the following manner. The numerator of the fraction for each year the expected life of the asset in that particular year. The denominator of he fraction is the sum of these expected life periods.

An asset costing $1,000 and having a scrap value of $100 has a 5-year life. n the beginning the asset has an expected life of 5 years, one year later it has n expected life of 4 years, and so on. Thus the expected life periods are 5, 4, , 2 and 1 years. The sum of these expected life periods is 15 and this is the ommon denominator of the annual rates. The numerators are respectively , 4, 3, 2, 1. Thus the rates are 5/15, 4/15, 3/15, 2/15, 1/15. The base is 1,000 − $100 = $900.

Age of sset in ears	Varying Depreciation Rates	Annual Depreciation	Accumulated Depreciation	Book Value of Asset $1,000
0	—	—	—	
1	5/15 or 33⅓%	$300	$300	700
2	4/15 or 26⅔%	240	540	460
3	3/15 or 20%	180	720	280
4	2/15 or 13⅓%	120	840	160
5	1/15 or 6⅔%	60	900	100

Either of these two methods will be found useful as well as equitable when experience has shown cost of repairs to increase as depreciation charges decrease.

COMPOUND INTEREST METHODS.—The principle involved in compound interest methods is that the amounts set aside periodically are expected to bear interest such as may be expected of other cash funds. Thus, in addition to the annual contributions to the reserve there is also included in it the interest it earns. There are three divisions of the compound interest method: (1) sinking fund method, (2) annuity method, and (3) unit cost method.

SINKING FUND METHOD.—The problem in this instance is to determine the amount, which set aside periodically at a fixed rate of interest compounded. will, at the close of the life of the asset, have accumulated the original cost less scrap value.

As the method to be used in finding the periodic additions to the sinking fund has already been explained in the foregoing pages (see page 113), it will not be necessary to repeat it here in connection with computation of periodic depreciation by the sinking fund method.

As in the preceding example, assume an asset of $1,000 with a scrap value of $100 and a life of 5 years. The following is a schedule of depreciation obtained by using the sinking fund method:

	Periodic Depreciation Charges			Net Book Value of Asset	Accumulations in Sinking Fund
Periods	S. F. Contribution	Interest at 5%	Total		
0	$ —	$ —	$ —	$1,000.00	$ —
1	162.88	—	162.88	837.12	162.88
2	162.88	8.14	171.02	666.10	333.90
3	162.88	16.69	179.57	486.53	513.47
4	162.88	25.67	188.55	297.98	702.02
5	162.88	35.10	197.98	100.00	900.00
	$814.40	$85.60			

The net book value at the close of the 5th year is the scrap value or $100. The total amount accumulated in the sinking fund is $900, yet the total amount set aside out of earnings has only been $814.40, the balance $85.60 has been earned by the accumulated deposits in the sinking fund with interest at 5%.

ANNUITY METHOD.—The annuity method also makes use of compound interest but the annual charge to depreciation is greater than in the preceding instance. The assumption made here is that the interest earned by the accumulations to the sinking fund are first added to the book value of the asset and the depreciation is then deducted from that net book value thus augmented. A part of the charge to depreciation is therefore the same interest which has been added to the asset.

The chief characteristic of this method is that the entire investment is always earning interest either through the sinking fund or through the net book value. The schedule following will make this clear. Use the same data as in the preceding illustration.

	Periodic Depreciation Charges				Net Book Value plus Interest	Net Book Value
Periods	Fixed Amount	Int. at 5% on Fixed Amount	Interest on Net Book Value at 5%	Total Charge		
0	$ —	$ —	$ —	$ —	$ —	$1,000.00
1	162.88	—	50.00	212.88	1,050.00	837.12
2	162.88	8.14	41.86	212.88	878.98	666.10
3	162.88	16.69	33.31	212.88	699.41	486.53
4	162.88	25.67	24.33	212.88	510.86	297.98
5	162.88	35.10	14.90	212.88	312.88	100.00
	$814.40	$85.60	$164.40	$1,064.40		

ttention is called to the fact that the fixed amount, interest on the fixed ount and net book value in the above schedule are the same as those appear- in the corresponding columns in the previous sinking fund schedule. The l charge to depreciation, however, is increased under the annuity method the interest on the net book value. This method has little to recommend it. s more complicated than the preceding one, and in addition, it introduces a estionable procedure when it includes interest as a depreciation charge.

NIT COST METHOD.—This method introduces such complicated mathe- ical processes that it is rarely used. It is mentioned here merely to complete discussion on depreciation methods and to give briefly its purpose. The et of this method is to distribute over each unit of product the total de- iation charge consisting of:

1. Cost of interest on the investment
2. Cost of operation and repairs
3. True depreciation by sinking fund method

MISCELLANEOUS.—There are several other methods for computing reciation which do not fit into any of the previous classifications. These e been designated by one well known author as "a miscellaneous mongrel d." However, there are four miscellaneous methods which should be sidered.

1. Maintenance method
2. Appraisal method
3. Gross earnings method
4. Insurance method

MAINTENANCE METHOD.—In this method, the charge for maintaining asset is the amount charged to depreciation. Thus in the early years of the of the asset the charge will be small, becoming greater in later years. It a great disadvantage in that during years of retrenchment when only the st needed repairs are made, the depreciation is not retarded and therefore actual asset value is less than book value. Maintenance is not a measure depreciation.

APPRAISAL METHOD.—At the close of the period a physical appraisal the asset is taken. The difference between the appraised value of the asset t the beginning and end of the year is charged to depreciation. This method **two disadvantages** other than the cost of taking the appraisals. These are: the appraisals are too close together to permit a true valuation; (2) the ysical appraisals are subject to present market fluctuations which really ve no bearing on actual wear and tear.

GROSS EARNINGS METHOD.—This method does not differ very much m the unit production method in that it is dependent on the profits earned. the article manufactured is of standard design and the price is fairly constant, s method has much to commend it. The gross earnings method is used as lows: The gross earnings are estimated for the composite life of the plant d the depreciation charges are prorated over the same period on the basis of tual gross earnings for each period as compared with the estimated gross rnings. If the gross earnings bear no relation to the quantity produced viously this method should not be used.

INSURANCE METHOD.—This method can be successfully used only in ose industries having a very large number of like units and sufficient statistical ta to permit the life of the unit to be determined. It requires the setting up mortality tables for the assets similar in every way to the mortality tables ed in life insurance. In fact this method involves the actuarial principles of e insurance.

Depreciation Rates

(From Montgomery—Income Tax Procedure—1925)

NOTE: The inclusion of any suggested rate in the following table does not necessarily indicate that the author of this book approves of such rate. In general, however, he believes the rates to be reasonable. Rates marked by an asterisk (*) are stated by the organizations publishing them to have been submitted to, and approved by, the Bureau of Internal Revenue.

Item	Rate Per Cent	Authority	Publication
Adding machines	20	Nicholson & Rohrbach	Cost Accounting
Agricultural machinery	10	Australia Fed. Income Tax	
	6–12	Montgomery, R. H.	Auditing, Theory & Practice, Vol. II
Alternators	5	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	4	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
Annealing pits	7½	Assn. Mfrs. Chilled Car Wheels	Uniform Cost Accounting System
Anvils	5–10	Am. Foundrymen's Assn.	Standard Foundry Costs
Apartment houses	3	U. S. Dist. Court (N. Y.)	Cohen v. Lowe, 234 Fed. 474
Asphalt pavements	5–6⅔	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	8⅓–10	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Automobiles:			
Motor cars	25–40	Dana, Richard T.	Handbook of Plant Construction
	25	Philadelphia Controller	Manual of Accounting
Motor trucks	20–25		Wisconsin Income Tax Law, 1922 edition
	20	Belt, R. E.	Foundry Cost Accounting
	25	Associated General Contractors	Bulletin, February 26, 1921
Bakeries:			
Machinery	10	Natl. Assn. Master Bakers	General & Cost Accounting System
Ovens and oven equipment	8	Do.	Do.
Shop equipment	16⅔	Do.	Do.
Barrels, steel tumbling	10	Am. Foundrymen's Assn.	Standard Foundry Costs
	15	Am. Malleable Castings Assn.	Cost Accounting Methods
Batteries, storage	5–11	Cravens, Geo. A.	Electrical Review, 1910
	5–6⅔	Floy, Henry	Valuation of Public Utilities
	3–10	Gillette & Dana	Mech. & Elect. Cost Data
Belting	5	Wisconsin P. S. Com.	Reports
	5–12½	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	12½	Assn. Mfrs. Chilled Car Wheels	Uniform Cost Accounting System
	4–10	Kimball, D. S.	Cost Finding
Bindery machinery	10	Davis, A. E.	How to Find Costs in Printing
Biscuit and cracker industry:			
Cans	20–25	Biscuit & Cracker Mfrs.	Cost Manual
Shipping trunks and crates	33⅓	Do.	Do.

Item	Rate Per Cent	Authority	Publication
Blowers:			
Centrifugal	6⅔	Gillette & Dana	Mech. & Elect. Cost Data
Gas plant	5–6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Boilers, general	6⅔*	Portland Cement Industry	Cost Accounting
	3⅓–6⅔	Am. Waterworks Assn.	Reports
	2½–10	Gillette & Dana	Mech. & Elect. Cost Data
	5–7½		Wisconsin Income Tax Law, 1922 Edition
Fire tube	7½	Am. Institute of Accountants	Special Bulletin No. 1
Water tube	5	Do.	Do.
Bottle machinery:			
Feeders and flow devices	12½	Natl. Bottle Mfrs. Assn.	Uniform Cost System
Lehrs, conveyors, etc	10	Do.	Do.
Mixers	10	Do.	Do.
Owen's machines	12½	Do.	Do.
Semi-automatics	20	Do.	Do.
Box (wooden) machinery	10	Natl. Assn. Box Mfrs.	Cost Finding and Acct. Plan
Bridges:			
Masonry	1	Bryan, W. H.	Eng. News, 1908
Steel	3	Do.	Do.
	4–5	Gillette & Dana	Mech. & Elect. Cost Data
Wooden	5–6⅔	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	10	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Buckets, excavating	18¾	Associated General Contractors	Bulletin, February 26, 1921
Buildings:			
Brick	3	Piez, Chas.	Trans. A. S. M. E., 1916
	4	Gillette & Dana	Mech. & Elect. Cost Data
	2–7	Bryan, W. H.	Eng. News, 1908
Concrete	1½	Wisconsin R. R. Com.	Reports
	2	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	4	U. S. Internal Revenue	Manual for the Oil & Gas Industry, 1921
Corrugated iron	10	Machinery Builders Soc.	Standard Accounting & Cost System
Fireproof, modern	2½	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	2–4	Foster, H. A.	Eng. Valuation of Public Utilities
Frame	5	Mucklow, Walter	Real Estate Accounts
	3–6	Kimball, D. S.	Cost Finding
Busses, urban	30		Aera—February, 1923

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Cables:			
Aerial, lead covered	8⅓	Wisconsin R. R. Com.	Reports
	6⅔–10	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	6⅔–8⅓	Gillette & Dana	Mech. & Elect. Cost Data
Underground, lead covered	4–5	Wisconsin R. R. Com.	Reports
	3⅓	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
Underground, main	5	McKay, C. W.	Telephone Rates and Values
Underground, subsidiary	8⅓	Do.	Do.
Cables and haulage for mines	50	Schwertner, F.	Coal Age, September 15, 1921
Cableway	11*	Portland Cement Industry	Cost Accounting
Canning machinery	15–20	Natl. Canners' Assn.	Special Bulletin No. 3
	10		Wisconsin Income Tax Law, 1922 Edition
Car bodies	4–6⅔	Floy, Henry	Valuation of Public Utilities
	5–8	Gillette & Dana	Mech. & Elec. Cost Data
Car trucks	3½–5	Floy, Henry	Valuation of Public Utilities
	3⅓–6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Cars:			
Elec. and street railway	3⅓–5	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	5–8½	Floy, Henry	Valuation of Public Utilities
Mine	25	Schwertner, F.	Coal Age, September 15, 1921
Steel railroad:			
Freight	2–3⅓	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Passenger	2½–3	Do.	Do.
Oil tank	5	U. S. Internal Revenue	Manual for the Oil & Gas Industry, 1921
Carts, hand drawn	20	Philadelphia Controller	Manual of Accounting
Chimneys:			
Brick	3–7	Gillette & Dana	Mech. & Elec. Cost Data
Steel	10	Do.	Do.
Chutes, loading and unloading	10–25	Am. Foundrymen's Assn.	Standard Foundry Costs
Clinker grinding machinery	8⅓*	Portland Cement Industry	Cost Accounting
Compressors, air	6	Piez, Chas.	Trans. A. S. M. E., 1916
	7½	Belt. R. E.	Foundry Cost Accounting
Concrete mixers	15	Associated General Contractors	Bulletin, February 26, 1921
	20		Concrete, March, 1922
	10		Wisconsin Income Tax Law, 1922 Edition
Condensers	4–5	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	3⅓–10	Gillette & Dana	Mech. & Elect. Cost Data
Condensers and scrubbers (gas plant)	3⅓	Do.	Do.

Item	Rate Per Cent	Authority	Publication
Conduits:			
Cast iron	1⅛–2	Gillette & Dana	Mech. & Elect. Cost Data
Clay	2	Foster, H. A.	Eng. Valuation of Pub. Utilities
Wooden	5	Do.	Do.
	2½–4	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Wrought iron or steel	3⅓–5	Gillette & Dana	Mech. & Elec. Cost Data
Confectionery machinery	10	Natl. Confectioners' Assn.	Cost Manual
Containers:			
Barrels, steel oil	14 2/7	U. S. Internal Revenue	Manual for the Oil & Gas Industry, 1921
Cans, milk, ash, feed	33⅓	Philadelphia Controller	Manual of Accounting
Casks	10	Various	Accountant's Index
Converters, rotary	3–6⅔	Cravens, G. A.	Elec. Review, 1910
	4–5	Gillette & Dana	Mech. & Elect. Cost Data
Conveyors, general	10–20	Am. Foundrymen's Assn.	Standard Foundry Costs
Belt or bucket	37½	Associated General Contractors	Bulletin, February 26, 1921
Coal or ash	10	Floy, Henry	Valuation of Public Utilities
	5	Atl. Coast Ship Builders' Assn.	Cost Accounting Manual
Core ovens and apparatus:			
Brick	10	Belt, R. E.	Foundry Cost Accounting
Steel	7½	Do.	Do.
Core machines	15	Do.	Do.
	15	Am. Malleable Castings Assn.	Cost Accounting Methods
Cotton mill machinery	4–6⅔	Szepesi, Eugene	Cost Control for Textile Mills
Cranes:			
General	2	Gillette & Dana	Mech. & Elect. Cost Data
	2–6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Locomotive	9½	Associated General Contractors	Bulletin, February 26, 1921
	10	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Traveling	7½	Belt, R. E.	Foundry Cost Accounting
	4½	Piez, Chas.	Trans. A. S. M. E., 1916
Cross-arms, electric light and power	10	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	8⅓–12½	Gillette & Dana	Mech. & Elect. Cost Data
Crucibles	7½	Belt, R. E.	Foundry Cost Accounting
Crusher, rock	12½	Associated General Contractors	Bulletin, February 26, 1921
	7*	Portland Cement Industry	Cost Accounting
Cupolas	5	Belt, R. E.	Foundry Cost Accounting
	10	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Dairies:			
Bottle fillers and cappers	18.2	Kelly & Clement	Bull. 890, U. S. Dept. of Agric.
Bottle washers	17.2	Do.	Do.
Cans, milk	20.0	Do.	Do.
Pasteurizers	18.8	Do.	Do.
Power plant equipment	9.4	Do.	Do.
Derricks:			
Steel	7½	Associated General Contractors	Bulletin, February 26, 1921
Wooden	15	Do.	Do.
Dies	25–50	Wood, C. E.	Accounting Methods for Industrials
	33⅓	Electrical Mfg. Industry	Accounting and Cost System
Dredges	9*	Portland Cement Industry	Cost Accounting
Drills:			
Presses	5–7½	Am. Foundrymen's Assn.	Standard Foundry Costs
Traction well	12½	Associated General Contractors	Bulletin, February 26, 1921
Tripod or jackhammer	18¾	Do.	Do.
Tripod	14*	Portland Cement Industry	Cost Accounting
Tunnel carriage	15	Associated General Contractors	Bulletin, February 26, 1921
Well	11*	Portland Cement Industry	Cost Accounting
Dry dock, floating	5	Atl. Coast Shipbuilders' Assn.	Cost Accounting Manual
Dryers, rotary and upright	9*	Portland Cement Industry	Cost Accounting
Dust collecting system	7½	Am. Foundrymen's Assn.	Standard Foundry Costs
	10	Am. Malleable Castings Assn.	Cost Accounting Methods
Dwellings:			
Brick	1½–2½	Tiffany, H. S.	Digest of Depreciation
Frame	2½–4½	Do.	Do.
	3	Gillette & Dana	Mech. & Elect. Cost Data
Dyeing equipment	15–20	Am. Dyers' Institute	Cost Accounting Methods
Elevators:			
Grain	3	Gillette & Dana	Mech. & Elect. Cost Data
Passenger	7½	Do.	Garment Weekly, March 24, 1923
Engines:			
Gas	5	Belt, R. E.	Foundry Cost Accounting
	6⅔–10	Kimball, D. S.	Cost Finding
	6⅔	Gillette & Dana	Mech. & Elect. Cost Data

Item	Rate Per Cent	Authority	Publication
Engines (*Continued*)			
Steam	5–10	Gillette & Dana	Mech. & Elect. Cost Data
	5	Belt, R. E.	Foundry Cost Accounting
	4–6.6	Cravens, G. A.	Elec. Review, 1910
Excavators:			
Cableway	12½	Associated General Contractors	Bulletin, February 26, 1921
Trench	15	Do.	Do.
Extractors, oil	5	Am. Foundrymen's Assn.	Standard Foundry Costs
Fans, ventilating	7½	Do.	Do.
Fences:			
Wire	7½	Belt, R. E.	Foundry Cost Accounting
Wooden	10	Do.	Do.
Fertilizer plants:			
Acidulating plant	15	Lodge, F. S.	The American Fertilizer, July 2, 1921
Commercial fertilizer plant	12	Do.	Do.
Sulphuric acid plant	12	Do.	Do.
Fire extinguishers	10	Philadelphia Controller	Manual of Accounting
Fire protection apparatus	8⅓	Grunsky, C. E.	Valuation, Deprec, & Rate Base
	10	Am. Foundrymen's Assn.	Standard Foundry Costs
	20	Plywood Mfg. Assn.	Standard Cost Accounting
Flasks:			
Aluminum	10	Am. Foundrymen's Assn.	Standard Foundry Costs
Cast iron	33⅓	Do.	Do.
Snap steel	12½	Do.	Do.
Flour mill machinery	4	Indiana Miller's Assn.	Modern Miller, October 15, 1921
Forges	10		Wisconsin Income Tax Law, 1922 Edition
	5	Am. Foundrymen's Assn.	Standard Foundry Costs
Fuel economizers	4	Brewer, A. F.	Combustion, February, 1922
Fuel oil equipment	4	Chicago Traction Val. Com.	Reports
Furnaces:			
Air	7½	Belt, R. E.	Foundry Cost Accounting
Annealing	10	Am. Malleable Castings Assn.	Cost Accounting Methods
Blast	5	Tiffany, H. S.	Digest of Depreciation
Electric or open hearth	10	Belt, R. E.	Foundry Cost Accounting
Glassware	5	Illuminating Glassware Guild	Uniform Cost System
Furniture and fixtures	10–20	Kester, R. B.	Accounting Theory and Practice, Vol. II
	5–8	Gillette & Dana	Mech. & Elect. Cost Data

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Gas holders	2½	Lyndon, L.	Rate Making for Public Utilities
Gas mains, city	10	U. S. Internal Revenue	Manual for the Oil and Gas Industry, 1921
General gas appliances	8–10	Lyndon, L.	Rate Making for Public Utilities
Generators	3⅓–8	Gillette & Dana	Mech. & Elect. Cost Data
	5–10	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	4–8.3	Cravens, G. A.	Elec. Review, 1910
	7½	Belt, R. E.	Foundry Cost Accounting
	6¼*	Portland Cement Industry	Cost Accounting
Glassware, mixers	10	Illuminating Glassware Guild	Uniform Cost System
Machinery	10	Do.	Do.
Grinders, air or electric drive	20	Am. Foundrymen's Assn.	Standard Foundry Costs
Hammers:			
Drop	10	Belt, R. E.	Foundry Cost Accounting
	4½	Piez, Chas.	Trans. A. S. M. E., 1916
Pneumatic	15	Clapham, F. T.	Mechanical World, 1917
Steam	10		Wisconsin Income Tax Law, 1922 Edition
Harness	12½	Philadelphia Controller	Manual of Accounting
	16.2*	Natl. Assn. of Ice Industries	
	20		Wisconsin Income Tax Law, 1922 Edition
Heating and ventilating system	5	Piez, Chas.	Trans. A. S. M. E., 1916
	4	Am. Foundrymen's Assn.	Standard Foundry Costs
	6	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Heating systems, steam	5	Belt, R. E.	Foundry Cost Accounting
Hoists, various	7½–12½	Various	Accountants' Index
Horses	5–20	Gillette & Dana	Mech. & Elect. Cost Data
	10	Philadelphia Controller	Manual of Accounting
	15.4*	Natl. Assn. of Ice Industries	
	16		Wisconsin Income Tax Law, 1922 Edition
Hose, fire	20	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Hotels (see Restaurants)			
Hydrants	2–3	Metcalf, Leonard	Trans. A. S. M. E., 1916
Ice cream machinery	12½	Roszell, L. W.	Ice Cream Trade Journal, March, 1922
Ice cream tubes, cases, cabinets	20	Do.	Do.
Ice houses, wooden for natural ice	6.4*	Natl. Assn. of Ice Industries	
Ice harvesting and hoisting machinery, including conveyors, merrimacs and basin saws, elevators and power plants	9½*	Do.	

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Ice manufacturing:			
Electric driven	7.3*	Natl. Association of Ice Industries	
Steam driven	7.1-7.6*	Do.	
Injectors, boiler	10	Am. Foundrymen's Assn.	Standard Foundry Costs
Jigs	33⅓	Electrical Mfg. Industry	Accounting and Cost System
Kilns, general	7.7*	Portland Cement Industry	Cost Accounting
Continuous heat	7½	Am. Institute of Accountants	Special Bulletin No. 9
Periodic heat	10	Do.	Do.
Laboratory equipment	10	Belt, R. E.	Foundry Cost Accounting
Lathes, steel	10	Do.	Do.
Laundry equipment	8⅓	Philadelphia Controller	Manual of Accounting
Laundry machinery and equipment	10	Laundry Owners' Nat. Assn.	Standardized System of Cost Accounting
Lockers, steel	5	Am. Foundrymen's Assn.	Standard Foundry Costs
Locomotives, steam or electric	6⅔	Nicholson & Rohrbach	Cost Accounting
Quarry	7.7*	Portland Cement Industry	Cost Accounting
Lumber industry:			
Log cars	8⅓–12½	Berry, S.	American Lumberman, October 9, 1920
Steam logging equipment	10–14 2/7	Do.	Do.
Steam skidders	8⅓–10	Do.	Do.
Steam loaders	6⅔–10	Do.	Do.
Machinery, general	7½–10	Woods, C. E.	Accounting Methods for Industrials
	5–10	Belt, R. E.	Foundry Cost Accounting
	4	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	12½	Gillette & Dana	Mech. & Elect. Cost Data
Meters:			
Electric	5	Am. Foundrymen's Assn.	Standard Foundry Costs
	6⅔–8	Gillette & Dana	Mech. & Elect. Cost Data
Gas	4	Do.	Do.
Natural gas	20	U. S. Internal Revenue	Manual for the Oil and Gas Industry, 1921
Oil	7½	Am. Foundrymen's Assn.	Standard Foundry Costs
	10		Wisconsin Income Tax Law, 1922 Edition
Steam flow	10	Do.	Standard Foundry Costs
Water	5	Gillette & Dana	Mech. & Elect. Cost Data
Milling machines	10	Belt, R. E.	Foundry Cost Accounting
Mines, coal:			
Electric equipment	10–20*	Reed, W. B.	Bituminous Coal Mine Accounting

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Mines, coal (*Continued*)			
Cable and haulage	50*	Reed, W. B.	Bituminous Coal Mine Accounting
Locomotives	10*	Do.	Do.
Mine cars	25*	Do.	Do.
Mining machines	14⅞–20*	Do.	Do.
Motors	10*	Do.	Do.
Mules and horses	25*	Do.	Do.
Ovens:			
Beehive	10*	Do.	Do.
By-product	6⅔–8⅓*	Do.	Do.
Powder plant	14 2/7*	Do.	Do.
Pumps	10–20*	Do.	Do.
Rails	10–20*	Do.	Do.
Mining machines	12½–20	Schwertner, F.	Coal Age, September 15, 1921
Molding equipment	15–20	Am. Malleable Castings Assn.	Cost Accounting Methods
	15	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Molds	33⅓	Electrical Mfg. Industry	Accounting and Cost System
Motors, electric	5	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	12½	Associated General Contractors	Bulletin, February 26, 1921
	4–8.3	Cravens, G. A.	Elect. Review, 1910
	7*	Portland Cement Industry	Cost Accounting
Oil filters	10		Wisconsin Income Tax Law, 1922 Edition
Oil separators	7½	Belt, R. E.	Foundry Cost Accounting
Ovens:			
Coke:			
Beehive	10	Schwertner, F.	Coal Age, September 15, 1921
By-products	6⅔	Do.	Do.
Core	10	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Paper industry:			
Acid pumps	20	Catlin, E. S.	Paper Trade Journal, March 22, 1923
Ground wood process equipment	4–10	Do.	Do.
Soda process equipment	4–10	Do.	Do.
Sulphite process equipment	3⅓–10	Do.	Do.
Wood preparing process equipment	7 1/7–20	Do.	Do.
Patterns	75–100	Piez, Chas.	Trans. A. S. M. E., 1916
	20–33⅓	McIntosh, Robt.	Reference Book of Accounting (2nd Ed.)

Item	Rate Per Cent	Authority	Publication
Pavements:			
Asphalt	7	Foster, H. A.	Eng. Valuation of Public Utilities
Brick	4½	Gillette & Dana	Mech. & Elect. Cost Data
Granite	4 4/5–6¼	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Macadam	5½–12½	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
Wood block	3⅓–5	Do.	Do.
Pile Drivers:			
Steam	10	Atl. Coast Shipbuilders' Assn.	Cost Accounting Manual
	9½	Associated General Contractors	Bulletin, February 26, 1921
Track	7½	Do.	Do.
Piping, general	4	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	4–8.3	Cravens, G. A.	Elect. Review, 1910
	10	Kent, William	Cost Accounting for Factories
Air	5	Am. Foundrymen's Assn.	Standard Foundry Costs
Fuel-oil	5–10	Do.	Do.
Sewer and drainage	6	Machinery Builders' Society	Accounting and Cost System
Water and steam	5–7½	Am. Foundrymen's Assn.	Standard Foundry Costs
Planers	5–7		Wisconsin Income Tax Law, 1922 Edition
Plumbing	3⅓–4	Philadelphia Controller	Manual of Accounting
Poles:			
Concrete, reinforced	2	Barker, Harry	Public Utility Rates
Iron or steel set in concrete	3½–6⅔	Foster, H. A.	Eng. Valuation of Public Utilities
Wood	5½–10	Do.	Do.
Power plant equipment	7½	Belt, R. E.	Foundry Cost Accounting
Presses:			
Arbor	5–7		Wisconsin Income Tax Law, 1922 Edition
Drill	10	Belt, R. E.	Foundry Cost Accounting
Hydraulic forging	5–7		Wisconsin Income Tax Law, 1922 Edition
Punch	4½	Piez, Chas.	Trans. A. S. M. E., 1916
Printing trade machinery:			
Bed, platen and cylinder embossers	15	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
Binding	7½		Wisconsin Income Tax Law, 1922 Edition
Box department, paper	10	Bureau of Envelope Mfrs.	Revised Cost Manual
Clasp and tension	15	Do.	Do.
Cutters, straight and die	5	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
	7½	Bureau of Envelope Mfrs.	Revised Cost Manual

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Printing trade machinery (*Continued*)			
Cutters and creasers:			
Cylinder	7½–10	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
Platen	7½–10	Do.	Do.
	10	Bureau of Envelope Mfrs.	Revised Cost Manual
Electro foundry	7½–10	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
Folding, plunger and open-end	10	Bureau of Envelope Mfrs.	Revised Cost Manual
Gluers, automatic	7½	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
Gummers, machine	10	Bureau of Envelope Mfrs.	Revised Cost Manual
Ink grinders	5	Folding Box Mfrs. Natl. Assn.	Uniform Cost System
Presses:			
Flat and rotary	7½–10	Do.	Do.
Offset	10–12½	Do.	Do.
Stands, chases, stones	10		Wisconsin Income Tax Law, 1922 Edition
Pug mills, grinding pans, etc	10	Am. Institute of Accountants	Special Bulletin No. 9
Pumps	5–8⅓	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	5	Belt, R. E.	Foundry Cost Accounting
Rails	8	Gillette & Dana	Mech. & Elect. Cost Data
	3⅓–10	Bay State Rate Case	Pub. Util. Reports annotated, 1916 F
	4–6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Refinery equipment:			
Distillation	15	U. S. Internal Revenue	Manual for the Oil and Gas Industry, 1921
Lubricating plant	10	Do.	Do.
Miscellaneous	10	Do.	Do.
Pipes and fittings	12	Do.	Do.
Power plant	10	Do.	Do.
Storage	8	Do.	Do.
Restaurants:			
China and glassware	50	Howarth, E. B.	The American Restaurant, April, 1922
Equipment, heavy	10	Do.	Do.
Kitchen utensils	25	Do.	Do.
Linen	33⅓	Do.	Do.
Steam table	20	Do.	Do.
Rice milling machinery	10	Tapp, T. J.	Journal of Accountancy, January, 1923
Riveters:			
Hydraulic	5–7		Wisconsin Income Tax Law, 1922 Edition
Pneumatic	5–7		Do.
Rolling stock, railroad	5–7	Foster, H. A.	Eng. Valuation of Public Utilities
	5–8½	Chicago Traction Com.	Report

Depreciation Rates—Continued.

Item	Rate Per Cent	Authority	Publication
Rolls:			
Bending and straightening	5–7		Wisconsin Income Tax Law, 1922 Edition
Sand blast barrels and tables	25	Belt, R. E.	Foundry Cost Accounting
Sand mixers	15	Do.	Do.
Sawmill machinery	7½	British Inland Revenue	
Saw rigs	18¾	Associated General Contractors	Bulletin, February 26, 1921
Scales	15	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Wagon and track	10		Wisconsin Income Tax Law, 1922 Edition
Crane	10		Do.
Portable	10		Do.
Sewers	2½	Belt, R. E.	Foundry Cost Accounting
Shafting, pulleys, etc	5		Wisconsin Income Tax Law, 1922 Edition
	4¾	Kimball, D. S.	Cost Finding
	10	Assn. Mfrs. Chilled Car Wheels	Cost Accounting System
Ships, steel or iron:			
Inland water	2½	Gillette & Dana	Mech. & Elect. Cost Data
Ocean-going	3	Do.	Do.
Shop equipment	5–15	Cravens, G. A.	Elect. Review, 1910
Shovels:			
Electric	10¾	Associated General Contractors	Bulletin, February 26, 1921
Gasoline	18¾	Do.	Do.
Steam	12½	Do.	Do.
	9*	Portland Cement Industry	Cost Accounting
Sleighs	10		Wisconsin Income Tax Law, 1922 Edition
Sprinkler system	3–7½	Am. Foundrymen's Assn.	Standard Foundry Costs
	5	Belt, R. E.	Foundry Cost Accounting
Stacks:			
Brick	5	Do.	Do.
	3	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Steel	4–10	Am. Waterworks Assn.	Reports
Steel	10	Gillette & Dana	Mech. & Elect. Cost Data
Steam power plants	5	Do.	Do.
Steam separators	10	Am. Foundrymen's Assn.	Standard Foundry Costs
Steam traps	7½	Do.	Do.
Steel lockers	5		Garment Weekly, March 24, 1923
Stokers:			
Fixed parts	5	Chicago Traction Val. Com.	Reports
Moving parts	20	Do.	Do.

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Stokers and equipment	5	Brewer, A. F.	Combustion, February, 1922
Sub-stations:			
Buildings	2½	Approved Dept. Pub. Util. Mass.	Electric Ry. Journal, February 3, 1923
Equipment	6⅔	Do.	Do.
Superheaters	3⅓	Brewer, A. F.	Combustion, February, 1922
Switchboards	8⅓	Philadelphia Controller	Manual of Accounting
Electric companies	4½	Foster, H. A.	Eng. Valuation of Public Utilities
	2–6⅔	Gillette & Dana	Mech. & Elect. Cost Data
Telephone	10–12½	Foster, H. A.	Eng. Valuation of Public Utilities
	8⅓–12½	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Switchboard and instruments	2–8.3	Cravens, G. A.	Elect. Review, 1910
Tanks:			
Steel	6⅔	Gillette & Dana	Mech. & Elect. Cost Data
	4½	Piez, Chas.	Trans. A. S. M. E., 1916
Wooden	10	Do.	Do.
	8⅓	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Taxicabs	33⅓	Am. Institute of Accountants	Special Bulletin No. 9
Telephone:			
Central office equipment	8½	McKay, C. W.	Telephone Engineer, October, 1922
Subscriber's station apparatus	11–12½	Do.	Telephone Rates and Values
Testing machines, tensile	5	Belt, R. E.	Foundry Cost Accounting
Tools:			
Machine	5	Foster, H. A.	Eng. Valuation of Public Utilities
Small	10	Floy, Henry	Valuation of Public Utilities
	50	Piez, Chas.	Trans. A. S. M. E., 1916
Tractors:			
Caterpillar	15	Associated General Contractors	Bulletin, February 26, 1921
Electric, industrial	25	Belt, R. E.	Foundry Cost Accounting
	10	Am. Foundrymen's Assn.	Standard Foundry Costs
Transformers	4½	Foster, H. A.	Eng. Valuation of Public Utilities
	6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Turbines:			
Steam	3–5	Cravens, G. A.	Elect. Review, 1910
Steam	2½–5	Gillette & Dana	Mech. & Elect. Cost Data
	3⅓–6⅔	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	4–5		Wisconsin Income Tax Law, 1922 Edition

Depreciation Rates—(Continued)

Item	Rate Per Cent	Authority	Publication
Turbines (*Continued*)			
Water	2–3⅓	Grunsky, C. E.	Valuation, Deprec. & Rate Base
	3⅓	Gillette & Dana	Mech. & Elect. Cost Data
Type	25	United Typothetae	Standard Accounting System for Printers
	33⅓	Denham, R. S.	Manual of Cost Eng. & Estimating
Typewriters	20	Nicholson & Rohrbach	Cost Accounting
Underwear mill machinery	6⅔–10	Szepesi, Eugene	Cost Control for Textile Mills
Valves, general	6	Gillette & Dana	Mech. & Elect. Cost Data
	4	Philadelphia Controller	Manual of Accounting
Gate:			
Brass	5	Am. Foundrymen's Assn.	Standard Foundry Costs
Iron	10	Do.	Do.
Ventilating systems	5	Piez, Chas.	Trans. A. S. M. E., 1916
Wagons, general	5	Philadelphia Controller	Manual of Accounting
	16		Wisconsin Income Tax Law, 1922 Edition
Dump and hauling	18¾	Associated General Contractors	Bulletin, February 26, 1921
Warehouses:			
Steel and tile	2	Philadelphia Controller	Manual of Accounting
Equipment	6	Am. Warehousemen's Assn.	Distribution & Warehousing, March, 1921
Water mains, cast iron	2	Bd. Water Com., Springfield, Mass.	Appraisal Report
Welding apparatus:			
Acetylene	10	Am. Foundrymen's Assn.	Standard Foundry Costs
Electric	5	Do.	Do.
Wells:			
Driven or drilled	1⅓–2	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Gas	10	Do.	Do.
Wharves	3	Gillette & Dana	Mech. & Elect. Cost Data
	2	Philadelphia Controller	Manual of Accounting
Wires, telephone (copper)	5	Foster, H. A.	Eng. Valuation of Public Utilities
	5–10	Grunsky, C. E.	Valuation, Deprec. & Rate Base
Wiring:			
Electric	7½	Belt, R. E.	Foundry Cost Accounting
Switchboard	6	Piez, Chas.	Trans. A. S. M. E., 1916
Woodworking machinery	5	Nicholson & Rohrbach	Cost Accounting
	5–7		Wisconsin Income Tax Law, 1922 Edition
Woolen mill machinery	4–6⅔	Szepesi, Eugene	Cost Control for Textile Mills

Valuation of Wasting Assets

WASTING ASSETS DEFINED.—Wasting assets are considered to be those whose life cannot be restored through replacement, or prolonged through repairs or renewals.

Depletion is the amount by which the value of property has been reduced through removal or extraction of material such as mineral from mines, oil from oil wells, timber from forests. It is analogous to depreciation and has sometimes been defined as depreciation of natural resources.

PROBLEM OF VALUATION.—The man who invests his money in a wasting asset expects that investment to yield not only interest on the amount invested but also to return his principal when the asset is exhausted. It becomes necessary, therefore, for the concern operating the property to create a **sinking fund** to return the investment at the end of the estimated life of the property.

FACTORS INVOLVED IN VALUATION OF MINES.—In valuing mines or other natural resources the following factors are required.

1. Estimated life of mine.
2. Estimated productive tonnage.
3. Estimated cost of plant necessary to remove tonnage.
4. Rate of investment return.
5. Rate of interest sinking fund investment will yield.
6. Estimated annual net profit to be expected.

In the United States, the rate of interest the sinking fund investment is expected to yield is 4% compounded annually. The other factors are variable.

U. S. TREASURY TABLE FOR DETERMINING VALUE OF WASTING ASSETS.—Table 19 is a modified form of **Hoskold's table** and is used by engineers in the Natural Resources Division of the Treasury Department. It will be noted that the columns are headed at the yield rate, but the factors themselves include a redemption rate of 4%.

Example: An estate wishes to dispose of a coal mine which has been in operation for several years. A competent engineer submits the following data.

1. Life of mine is estimated to be 21 years.
2. Gross tonnage available for sale is 25,000,000 during the life of the mine.
3. Estimated gross profit per ton will be 65 cents.
4. Plant will need to be practically rebuilt within 3 years at a cost of $500,000. The old plant has little scrap value.
5. The discount factor is 8% and 4%.

This discount factor represents an annual dividend of 8% per year over the life of the property and replacement of capital through sinking fund investment at 4%.

What price shall be paid for this property? In other words, what is the present value?

Gross tonnage available	25,000,000
Gross profits per ton	$.65
Total gross profit expected	$16,250,000.00
Discount factor at 8% and 4% for 21 years (taken from table)	.427920
Gross value of property $16,250,000 × .427920 =	$ 6,953,700.00
Less: Present value of new plant to be installed within 3 years, using an interest rate of 6%—from Table 9 the factor is .8396193.	
$500,000 × .8396193	419,809.65
Price to be paid for mine	$ 6,533,890.35

Table 19. Present Worth of Each Dollar of Operating Profit

Accumulated during life of n years, assuming annual rate of production and operating profits per unit to be uniform and providing for interest on present worth at i_1 per cent annually and a payment into a sinking fund which at 4 per cent, interest compounded annually, will amount to the present worth, i.e., provide for return of capital, at the end of life.

Yrs.	6%	7%	8%	9%	10%	12%	15%
1	.943396	.934579	.925925	.917431	.909090	.892857	.869565
2	.908766	.892946	.876891	.861777	.847176	.819408	.781010
3	.876389	.853937	.832607	.812317	.792993	.756976	.708694
4	.846052	.818370	.792418	.768072	.745178	.703254	.648525
5	.817570	.785469	.755780	.728260	.702675	.656540	.597680
6	.790781	.754961	.722245	.692177	.664641	.615547	.554148
7	.765540	.726638	.691435	.659519	.630410	.579284	.516457
8	.741717	.700174	.663032	.629635	.599440	.546979	.483507
9	.719198	.675487	.636765	.602251	.571286	.518017	.454455
10	.697880	.652354	.612404	.577066	.545581	.491906	.428649
11	.677672	.630699	.589748	.553820	.522019	.468244	.405574
12	.658489	.610277	.568624	.532281	.500344	.446702	.384818
13	.640258	.591066	.548887	.512330	.480337	.427009	.366049
14	.622911	.572950	.530401	.493737	.461815	.408936	.348995
15	.606385	.555828	.513053	.476390	.444619	.392292	.333431
16	.590625	.539630	.496741	.460167	.428610	.376914	.319170
17	.575581	.524283	.481376	.444963	.413671	.362663	.306056
18	.561205	.509716	.466880	.430685	.399699	.349420	.293955
19	.547455	.496371	.453178	.417253	.386603	.337082	.282754
20	.534292	.482719	.440211	.404592	.374302	.325559	.272358
21	.521680	.470171	.427920	.392637	.362729	.314774	.262682
22	.509587	.458216	.416255	.381334	.351818	.304658	.253654
23	.497979	.446805	.405166	.370630	.341517		
24	.486835	.435903	.394619	.360479	.331775		
25	.476122	.425477	.384571	.350840	.322549		
26	.465820	.415496	.374988	.341675	.313799		
27	.455905	.405935	.365839	.332951	.305488		
28	.446356	.396767	.357096	.324637	.297587		
29	.437155	.387970	.348734	.316704	.290063		
30	.428283	.379520	.340726	.309127	.282893		
31	.419724	.371399	.333054				
32	.411462	.363589	.325695				
33	.403483	.356072	.318631				
34	.395772	.348832	.311846				
35	.388318	.341856	.305324				
36	.381108	.335128	.299049				
37	.374130	.328637	.293009				
38	.367375	.322371	.287190				
39	.360832	.316318	.281581				
40	.354491	.310468	.276171				
41	.348345	.304811	.270950				
42	.342385	.299339	.265909				
43	.336602	.294043	.261038				
44	.330990	.288913	.256328				
45	.325540	.283945	.251774				
46	.320248	.279128	.247367				
47	.315107	.274459	.243100				
48	.310109	.269929	.238967				
49	.305250	.265533	.234962				
50	.300525	.261266	.231079				

Factors in Above Table

$$\frac{P.V.}{n} = \frac{1}{\frac{ni}{R^n - 1} + ni_1}$$

Derived from Hoskold's Formula

Present value of \$1 per annum in n years, interest on capital being at one rate, i_1, and for redemption another rate, i, per cent. $\Big\}$ $= P.V.$

$$P.V. = \frac{1}{\frac{i}{R_n - 1} + i_1} \quad \text{where } R^n = (1 + i)^n$$

SECTION 3

FINANCIAL STATEMENTS AND REPORTS

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SECTION 3

FINANCIAL STATEMENTS AND REPORTS

GENERAL.—This section is planned for the reader who has a working knowledge of financial statements, and is limited to a consideration of the financial **statements and reports of ordinary businesses,** such as manufacturing and trading, which have no highly technical phases requiring special treatment in their statements. Technical features of financial statements of governments and their various branches, banks, insurance companies, public utilities, etc., will not be dealt with.

Any statement dealing with financial affairs might be called a financial statement. The financial statements herein considered, however, are primarily those statements which are prepared according to fairly well settled and generally understood principles of form; that is, statements in the forms generally used by well conducted business concerns. The principal statements are the balance sheet, which is intended to show the financial condition of a business at a given date, and the income or profit and loss statement, which is intended to show the gross income, costs, expenses and net income or loss of a business during a given period. These statements are more or less standardized for different kinds of undertakings. In addition to these standard statements all sorts of statements are in use to give other information relative to the financial affairs of businesses.

There are few fixed rules applicable to the preparation of financial statements; form and contents must vary according to circumstances and purposes as well as according to the integrity, judgment and skill of those who prepare them.

Some of the more **important purposes** for which financial statements and reports are required are:

1. Internal management
2. Reports to stockholders
3. Maintenance of credit relations
4. Reports to governmental bodies
5. Flotation of security issues
6. General publication

Balance Sheet

DEFINITION AND STRUCTURE.—A balance sheet is a condensed statement of the **assets, liabilities and net worth or deficiency** of an individual organization, or any financial entity, at a given date and in a form more or less definitely prescribed by custom. This statement is universally used to show the financial condition of business concerns.

Unless otherwise indicated a balance sheet should show conditions as at the close of business of the date named. If the source or the basis of the figures is not apparent proper explanation should appear on the face of the balance sheet. This requirement particularly applies to appraisals, revaluations and analyses of surplus or deficit. Some concerns have a bad habit of concealing important changes. As with other bad habits there is an inevitable day of reckoning. If concerns will adopt the rule of too many—rather than too few

—explanations on the face of balance sheets their officers may avoid many embarrassing moments.

Every balance sheet has two divisions, one composed of **assets** and the other of (a) **liabilities** and (b) **net worth or deficit.** In the case of a corporation net worth is capital stock plus surplus or minus deficit; in the case of an individual or partnership net worth or deficit is the difference between the assets and liabilities. In the United States and most other countries assets are shown either at the left or at the top (according to the form in which the items are tabulated) of liabilities and net worth. In England the order of arrangement is the reverse.

Items within the two divisions vary from liquid, current or quick to permanent or fixed and should be arranged in this order or its reverse. Items are grouped or shown in detail according to the purpose which the balance sheet is to serve.

A balance sheet is not a mere mechanical trial balance of a ledger. In the preparation of a balance sheet no pains should be spared in determining just what the items in the trial balance consist of and in rearranging, reclassifying, modifying, adding to, subtracting from and describing the items for the sake of clear, concise and correct presentation. The items in a properly prepared balance sheet seldom agree in detail with the book accounts. It is desirable, however, that the books be corrected, if necessary, to agree with the balance sheet in total amounts.

Where there are no books of account a balance sheet may be prepared from information obtained from other sources. When assets and liabilities are fully and correctly stated the main object of a balance sheet has been attained. Whether or not it balances is a minor consideration.

Assets

CLASSIFICATION OF ASSETS.—The principal classification of assets for balance sheet purposes are (1) current, quick or liquid and (2) fixed, permanent or capital. Common classifications in addition to these are (3) prepaid or deferred items, (4) intangibles and (5) investments.

Current, quick or liquid assets were defined as follows by the chairman of the committee of the American Institute of Accountants in answer to a question by a committee of the Robert Morris Associates:

"The terms 'current assets,' 'quick assets' and 'liquid assets' are generally used as almost interchangeable terms, although, strictly, they do not have exactly the same meaning. **Current assets** have been defined as cash, receivables from outsiders, and inventories of stock in trade, which in the regular course of business will be readily and quickly realized, together with such additional assets as may readily be converted into cash without impairing a business or enterprise (e.g., marketable securities other than those held for purposes of control, notes or accounts receivable from officers, stockholders or employees). **'Quick assets'** is most commonly used in banking circles and includes those current assets which consist of cash or which can and will be quickly converted into cash, e.g., inventories and accounts and notes receivable. The balance sheet included in the Federal Reserve Bulletin (see pages 180, 181) makes just this distinction between current and quick assets. A sub-total of quick assets is made including inventories, accounts and notes receivable, and cash, and to this sub-total are then added marketable securities which can be sold without impairing the business, and notes and accounts due from officers, stockholders and employees, the resulting total being described as 'total current assets.'

"The meaning of **'liquid assets'** in practice is the same as 'quick assets.' Regardless of the foregoing distinction, the terms 'quick' and 'liquid' assets are often somewhat loosely applied to the total of the assets described above as current assets.

"**'Working assets'** is a term adopted as descriptive of assets intermediate in character between capital and current assets; specifically, assets which are consumed by an enterprise in the activities carried on without themselves forming an integral part of the product, e.g., supplies used in operations. In practice it is usual in the case of a manufacturing concern to include the working assets, such as supplies, under the general caption of 'current assets.'

"In trust deeds and certificates of incorporation, 'current assets' and 'quick assets' are used as alternative terms, and such items as supplies, and also prepaid insurance, etc., are usually specifically included in the general definition of 'current assets' or 'quick assets.' In trust deeds the term 'liquid assets' is used much less frequently than the other two terms."

Assets which cannot be liquidated within a year, without serious injury to the business, are not ordinarily and should not be included under current assets.

Fixed, permanent or capital assets, as their name implies, include land, buildings, machinery, equipment, etc., which have a substantial length of life and which are held for use rather than for sale or for direct conversion into something for sale. Ordinarily assets of this character which are not held for use but for some other purpose should be classified separately. **Intangibles** should always be classified separately.

Funds tied up in securities or other property not necessary to the regular business of the concern are usually classified separately, often under the heading **"investments."** Investments in securities or other property may be included under current assets, however, if the securities can be readily liquidated at a determinable amount and can be used for current needs without serious consequences.

Prepaid expenses and deferred charges are usually grouped, but important items of this sort should be classified separately where material differences in character exist. Prepaid interest, insurance, taxes, etc., the amounts of which are based on definite periods of time, should not be mixed with deferred charges for development expenses, etc., the amounts of which are matters of judgment.

The following is a classification from Montgomery's "Auditing, Theory and Practice":

1. Current Assets:

(a) Cash (cash "items," if any, must be distributed under some other caption).
(b) Items the equivalent of cash, such as postage, revenue and war savings stamps.
(c) Accounts, notes receivable, and acceptances from trade debtors, net of reserves for bad and doubtful accounts, the maturities of which are less than one year from the date of the balance sheet.
(d) Instalment or deferred accounts and notes receivable, even though maturing more than one year from the date of the balance sheet, provided that such accounts or notes were accepted in ordinary course and conform to the terms which generally prevail in that line of business.
(e) Inventories of raw materials and finished goods, operating supplies, goods in process, and ordinary maintenance material and parts.
(f) Accounts and notes receivable from stockholders, employees, and

others when separately stated on the balance sheet and known to be collectible within less than one year.

(g) Advances on contracts; prepaid expenses, such as interest on bank loans; prepaid royalties, insurance, and taxes; and all other items, such as current advertising, catalogs, and booklets, which directly relate, as does the inventory, to current operations and which when and as used are operating costs. This class is limited to those items which would be paid in any event after the date of the balance sheet and which are not indicative of any expansion of the business.

(h) Securities and other items which are the equivalent of cash and which are intended to be or which readily may be converted into cash.

2. Fixed Tangible Assets:

(a) Plant, including land, mines, other natural resources and development costs, machinery, equipment, automobiles, furniture, tools, containers, and patterns.

(b) Inventories of plant items, such as construction and renewal materials and parts other than for maintenance.

(c) Items the same as (c) and (f) above, the benefits or maturities of which are more than one year from the date of the balance sheet.

(d) Deposits, prepaid items, etc., the benefit of which extend beyond one year from the date of the balance sheet.

(e) Securities of subsidiary or affiliated concerns. (If a consolidated balance sheet is not made up, advances to, and accounts receivable from, such concerns should be included in this group.)

(f) Fund investments when the assets in the funds are to be applied to the reduction of debts or for reinvestment for the purposes of the concern.

(g) Patents when acquired for cash.

3. Fixed Intangible Assets:

(a) Patents, trademarks, copyrights, subscription lists, etc.

(b) Goodwill.

(c) Deferred items, such as discount on bonds, and deferred items of an extraordinary nature, such as organization and exploitation expenses.

4. Miscellaneous Assets:

(a) Fiduciary and other items, such as claims and disputed items which cannot be included in the foregoing classifications.

(b) Discount on bonds.

CLASSIFICATION OF LIABILITIES.—Liabilities may be classified as (1) **current,** and (2) **long-term or fixed. Reserves** for uncertain liabilities and reserves for contingencies, are often included in a third group. Liabilities which should be paid within a year from the date of the balance sheet are usually considered current. Where a liability is payable in instalments over a period of years any amounts due within a year's time should ordinarily be included with current liabilities. The distinction between current and other liabilities is not, however, well settled.

CAPITAL.—The amounts of owners' or proprietors' rights in a business, constituting the net worth or capital, should be shown separately from the liabilities. As a rule, particularly in the case of corporations, **capital accounts** (such as capital stock and capital surplus) representing assets paid in are shown separately from accounts (such as earned surplus) created through the opera-

tions of the business. Where the rights of owners differ, the amounts representing assets paid in by each class should be shown separately in a detailed balance sheet.

FORMS OF BALANCE SHEETS.—Among large industrial corporations which publish their balance sheets, the most popular form is as follows:

Assets			Liabilities		
PLANT ASSETS:			CAPITAL STOCK		$.....
(Including Real Estate, Machinery, Patents, Goodwill, etc.)		$.....	BONDED DEBT		.....
DEFERRED CHARGES TO OPERATIONS:			CURRENT LIABILITIES:		
Insurance, Interest, etc., Prepaid		.....	Notes Payable	$.....	
CURRENT ASSETS:			Accounts Payable	.....	
Inventories	$.....		Accrued Wages, etc.	.....	.....
Accounts and Notes Receivable	.....		RESERVES		.....
Cash	.....	.....	SURPLUS		.....
		$.....			$.....

The above arrangement is not easy reading for one unaccustomed to accounts. Moreover it presupposes that the reader can discriminate between actual liabilities and surplus. The inclusion of surplus under a caption which is misleading, is unfortunate, especially when such procedure is unnecessary. When a financial manager issues a financial statement he should try to make its language understandable by those whose sympathetic support he may sometime need.

The form shown on page 179 is preferable.

It is asserted that there is a demand for the form of balance sheet given above from those whose principal desire is to see the relation of the fixed assets to the capital stock. But this information can be more readily secured from the above form, because where fixed items appear first it is usual to place the capital stock first among the liabilities and the surplus last. Since the surplus may be as large as or larger than the capital stock, it is very necessary to have these figures in juxtaposition, as provided in the second form.

One general principle which should be observed in all balance sheets is that the matter of the arrangement of the groups is not of so much importance as is the relation of one to another. That is, it does not greatly matter whether the fixed assets are placed first or last, but it is important that the balance sheet shall indicate, if possible, the relation of the fixed assets to the other assets and to the liabilities. For instance, a concern owning a million dollars of fixed assets should have a capital and surplus, or funded debt, of at least as much. Otherwise the current liabilities would be excessive.

FEDERAL RESERVE BOARD FORM.—In Fig. 1 is presented a balance sheet form suggested in 1917 by **the Federal Reserve Board** as a tentative proposal. In this form the item "deferred charges" is not included in current assets; no provision is made for the segregation of items such as stripping costs in a mine, bond discounts, etc. In modern practice deferred charges appear in their proper place in the balance sheet. Instead of showing goodwill as an asset, the book value is deducted from capital. The suggestion is unique. No doubt the intention was to show net worth exclusive of goodwill. The suggestion does not accord with the usual practice. In a later (1921) Federal Reserve form goodwill appears among the assets.

A MANUFACTURING COMPANY, INCORPORATED

BALANCE SHEET, DECEMBER 31, 1925

ASSETS

CURRENT ASSETS:		
Cash		$ 100,000.00
Certificates of Deposit		200,000.00
Marketable Securities (insert market value)		300,000.00
Accounts Receivable, net of Reserves		350,000.00
Notes Receivable, net of Reserves		90,000.00
Inventories (insert basis of valuation):		
Raw Materials	$110,000.00	
Merchandise, finished and in process	230,000.00	340,000.00
Prepaid Insurance, Interest and other items paid in advance		20,000.00
Miscellaneous Supplies		10,000.00
Total Current Assets		1,410,000.00
ADVANCES TO SUBSIDIARY AND AFFILIATED COMPANIES (when less than 50% ownership)		210,000.00
INVESTMENTS (insert basis of valuation)		400,000.00
PLANT:		
Land	$100,000.00	
Buildings	205,000.00	
Machinery and Equipment	340,000.00	
Furniture and Fixtures	20,000.00	
	665,000.00	
Less: Reserves	95,000.00	570,000.00
PATENTS		145,000.00
GOODWILL		700,000.00
		$3,435,000.00

LIABILITIES

CURRENT LIABILITIES:		
Notes Payable, banks and bankers		$ 170,000.00
Accounts Payable, trade creditors		180,000.00
Accrued Liabilities:		
Wages, Commissions, etc.	$ 20,000.00	
Interest, Royalties, Taxes, etc.	50,000.00	70,000.00
Reserves for Taxes:		
Federal Taxes	210,000.00	
State and other Taxes	30,000.00	240,000.00
Total Current Liabilities		660,000.00
BONDED INDEBTEDNESS:		
First Mortgage 7% Bonds, due January 1, 1930		500,000.00
Total Liabilities		1,160,000.00

CAPITAL

CAPITAL STOCK:		
Preferred, 7% cumulative (Authorized $1,000,000)	$ 880,000.00	
Common	1,000,000.00	
	1,880,000.00	
SURPLUS	395,000.00	2,275,000.00
		$3,435,000.00

ASSETS

Cash:
- 1a. Cash on hand—currency and coin . . . . . .
- 1b. Cash in bank . . . . . .

Notes and accounts receivable:
- 3. Notes receivable of customers on hand (not past due) . . . . . .
- 5. Notes receivable discounted or sold with indorsement or guaranty . . . . . .
- 7. Accounts receivable, customers (not past due) . . . . . .
- 9. Notes receivable, customers, past due (cash value, $....) . . . . . .
- 11. Accounts receivable, customers, past due (cash value, $....) . . . . . .

Less:
- 13. Provisions for bad debts . . . . . .
- 15. Provisions for discounts, freights, allowances, etc. . . . . .

Inventories:
- 17. Raw material on hand . . . . . .
- 19. Goods in process . . . . . .
- 21. Uncompleted contracts . . . . . .
  Less payments on account thereof . . . . . .
- 23. Finished goods on hand . . . . . .

Other quick assets (describe fully):
. . . . . .
. . . . . .

Total quick assets (excluding all investments) . . . . . .

Securities:
- 25. Securities readily marketable and salable without impairing the business . . . . . .
- 27. Notes given by officers, stockholders, or employees . . . . . .
- 29. Accounts due from officers, stockholders, or employees. . . . . .

Total current assets . . . . . .

Fixed assets:
- 31. Land used for plant . . . . . .
- 33. Buildings used for plant . . . . . .
- 35. Machinery . . . . . .
- 37. Tools and plant equipment . . . . . .
- 39. Patterns and drawings . . . . . .
- 41. Office furniture and fixtures . . . . . .
- 43. Other fixed assets, if any (describe fully) . . . . . .
  . . . . . .

Less:
- 45. Reserves for depreciation . . . . . .

Total fixed assets . . . . . .

Deferred charges:
- 47. Prepaid expenses, interest, insurance, taxes, etc. . . . . .

Other assets (49) . . . . . .

Total assets . . . . . .

FIG. 1. Federal Reserve Board

LIABILITIES

Bills, notes, and accounts payable:
Unsecured bills and notes—
2. Acceptances made for merchandise or raw material purchased . . . . . .
4. Notes given for merchandise or raw material purchased . . . . . .
6. Notes given to banks for money borrowed . . . . . .
8. Notes sold through brokers . . . . . .
10. Notes given for machinery, additions to plant, etc. . . . . .
12. Notes due to stockholders, officers, or employees . . . . . .

Unsecured accounts—
14. Accounts payable for purchases (not yet due) . . . . . .
16. Accounts payable for purchases (past due) . . . . . .
18. Accounts payable to stockholders, officers, or employees . . . . . .

Secured liabilities—
20a. Notes receivable discounted or sold with indorsement or guaranty (contra) . . . . . .
20b. Customers' accounts discounted or assigned (contra) . . . . . .
20c. Obligations secured by liens on inventories . . . . . .
20d. Obligations secured by securities deposited as collateral . . . . . .
22. Accrued liabilities (interest, taxes, wages, etc.) . . . . . .

Other current liabilities (describe fully):
. . . . . .
. . . . . .
Total current liabilities . . . . . .

Fixed liabilities:
24. Mortgage on plant (due date.....) . . . . . .
26. Mortgage on other real estate (due date.....) . . . . . .
28. Chattel mortgage on machinery or equipment (due date.....) . . . . . .
30. Bonded debt (due date.....) . . . . . .
32. Other fixed liabilities (describe fully):
. . . . . .
. . . . . .
Total liabilities . . . . . .

Net worth:
34. If a corporation—
(a) Preferred stock (less stock in treasury) . . . . . .
(b) Common stock (less stock in treasury) . . . . . .
(c) Surplus and undivided profits . . . . . .
Less:
(d) Book value of goodwill . . . . . .
(e) Deficit . . . . . .
36. If an individual or partnership—
(a) Capital . . . . . .
(b) Undistributed profits or deficit . . . . . .
Total . . . . . .

Form of Balance Sheet

Form No. 3 Revised—CORPORATION—CONFIDENTIAL

FORM DESIGNED AND APPROVED BY THE AMERICAN BANKERS ASSOCIATION.

Corporate Name.....

Main Office.....

Branches.....

Business.....

Location of Plant.....

ASSETS				LIABILITIES			
Cash on hand and in bank				Notes payable for merchandise			
Notes receivable of customers:				Acceptances issued			
Current				Notes payable to banks			
Past due, cash value				Notes payable for paper sold			
Accounts receivable of customers:				Notes payable to officers, directors and stockholders			
Current				Notes payable to others			
Past due, less than 6 months				Accounts payable—not due			
Past due, over 6 months				Accounts payable—past due			
Acceptances of customers				Accounts payable to officers, directors and stockholders			
Merchandise:				Deposits of money with this Co. by officers and others			
Finished				Secured liabilities by notes receivable			
In process, unfinished				Accounts receivable			
Raw material				Trade acceptances			
Collateral pledged to loans:				Merchandise			
Notes receivable				Securities			
Accounts receivable				Any other current liabilities			
Trade acceptances							
Merchandise							
Securities							
Other active assets							
Total active assets				Total current liabilities			
Due from controlled or allied concerns:				Mortgages or liens on real estate			
For merchandise				Bonded debt			
For advances				Chattel mortgages			
Stocks, bonds and investments				Any other liabilities—itemize			
Land							
Buildings							
Machinery, equipment and fixtures							
Horses, wagons and automobiles				Total liabilities			
Notes receivable—due from officers, stockholders and employees				Reserve—itemize			
Accounts receivable—due from officers, stockholders and employees							
Good will, patents and trade marks				Capital stock—pref. outstanding			
Other assets—itemize				Capital stock—com. outstanding			
				Capital stock—no par value			
Deferred assets				Surplus and undivided profits			
TOTAL				TOTAL			

FIG. 2. American Bankers Association Form of Statement (*Face*)

CONTINGENT LIABILITY OF ANY KIND

Upon receivables discounted or pledged
Upon accommodation paper or endorsements
Customers' accounts sold and assigned
As guarantee for others on notes, contracts, etc.
For bonds or unfinished contracts
For leases
Other contingent liabilities

COMMITMENT LIABILITY

Contract price of goods purchased, delivery to be made during 192
Present market value of goods purchased, delivery to be made during 192

Insurance. Fire, on Buildings $ Machinery, Fixtures and Equipment $
Merchandise $ Life in favor of Company $

Condensed Profit and Loss Statement for Fiscal Year Ending 192

EXPENSE		INCOME	
Cost of material or merchandise consumed		Net sales	
Actual expense of conducting business, including		From investments	
rent, taxes, insurance, etc.		From discount in purchase	
Salaries paid to officers		From other sources—itemize	
Int. on borrowed money, bonds			
Bad debts charged off			
Depreciation charged off			
Net profits			
TOTAL		TOTAL	

SURPLUS AND UNDIVIDED PROFITS

At close of previous year $
Less charges not applicable to current year
Add net profits as above—itemize
Less dividends (Preferred—per cent)
(Common—per cent)
(No par—per cent)
Undivided profits

We hereby certify that the foregoing figures are taken from the books of this Company, and that they and the statements contained on both sides of this sheet are true and give a correct showing of the financial condition of the Company.

Signed this day of 192

Name

By
(State official title)

I—We have audited the accounts of for the period from to and certify that in my our opinion the above Balance Sheet and Statement of Profit and Loss set forth the financial condition of the firm or company at and the results of its operations for the period.

Public Accountants.

WORTH OF ENDORSERS' EXCLUSIVE OF THEIR INTERESTS IN THE BUSINESS

$ $
$ $
$ $

FIG. 2. (*Reverse*)

CORPORATE FORM

NAME (Corporate Style Under Charter) CREDIT FILE No.

LOCATION

To Irving Bank-Columbia Trust Company, New York

The following true and accurate statement of the financial condition of this Corporation on the day of 19 is made and furnished by the undersigned for the purpose of procuring Credit from time to time with you for our negotiable paper or otherwise.

BALANCE SHEET (Federal Reserve Bank Requirement)

ASSETS	ITEMIZE	TOTAL
QUICK ASSETS		
Cash on Hand		
Cash in Banks (Schedule 1)		
Notes Receivable (Schedule 2)		
Accounts Receivable (Schedule 2)		
Inventory (Schedule 3)		
INVESTED ASSETS		
Land (Schedule 8)		
Buildings (Schedule 8)		
Machinery, Fixtures, Equipment (less Reserve $		
Investments (Schedule 4)		
Patents and Goodwill		
DEFERRED CHARGES		
Unexpired Insurance Premiums		
Prepaid Interest, etc.		
	TOTAL ASSETS	

LIABILITIES	ITEMIZE	TOTAL
SHORT TERM INDEBTEDNESS (Due Within One Year)		
Notes given for Merchandise		
Notes given for Borrowed Money (Schedule 1)		
Accounts Payable (Schedule 6)		
Liability for Acceptances under Letters of Credit (Schedule 1)		
Deposits of Money (Schedule 5)		
Dividends Unpaid, Accrued and other Liabilities		
LONG TERM INDEBTEDNESS (Due After One Year)		
Notes given for Borrowed Money (Schedule 1)		
Deposits of Money (Schedule 5)		
Bonded Debt. (Schedule 7)		
Mortgages on Real Estate or Chattels (Schedule 8)		
Other Liabilities due after one year		
Special Reserve (Not Deducted from Assets)		
	TOTAL LIABILITIES	
CAPITAL		
Preferred Stock Issued		
Common Stock Issued		
Surplus (As per Surplus Account)		
Deficit (As per Surplus Account)		
	TOTAL	

Amount of Forward Purchases not included in either Assets or Liabilities

FIRM SIGNATURE

1277 BY

FIG. 3. Form of Corporation Statement used by Irving Bank-Columbia Trust Co. (*Page 1*)

CONTINGENT LIABILITY (Federal Reserve Bank Requirement)

FORM	AMOUNT	FORM	AMOUNT
Upon Customers' Notes Discounted, Sold, or Otherwise Transferred		For Accommodation Endorsements or Guarantees	
Upon Drafts Discounted or Sold		Under Conditional Sale Contracts or Purchase Arrangements	
Upon Bonds or other Obligations of Subsidiary Cos		Under Agreement for Stock or other Subscription	
Upon Leases		Under Pending Law Suits	
Upon Unused Letters of Credit Outstanding		TOTAL	

Is this Firm a guarantor or endorser of any liabilities of any individual, firm, or corporation, or is it liable under any contracts, bonds or profit sharing arrangements or any other agreements, or are there any law-suits pending except as set forth above?

PROFIT AND LOSS ACCOUNT FROM 19 to 19

Inventory at beginning of Period (19)		Inventory at End of Period (19)	
Purchases-Net (Less Returns, etc., $)		Sales-Net (Less Returns, etc., $)	
Operating Expenses		Commissions Earned	
General Expenses		Discounts Earned	
Bad Debts Charged Off		Income from Investments, etc.	
Depreciation Charged Off		Losses of Previous Periods Recovered	
Reserves Created			
NET PROFIT		NET LOSS	
TOTAL		TOTAL	

SURPLUS ACCOUNT FISCAL PERIOD ENDING 19

Deficit at beginning of Period		Surplus at beginning of Period	
Dividends Paid Pref. $ Com. $		Credits to Surplus during Period	
Special Reserves Created			
Other Charges to Surplus			
Net Loss (from P & L Acct.)		Net Profit (from P & L Acct.)	
Surplus as per statement		Deficit as per Statement	
TOTAL		TOTAL	

INSURANCE

FORM	ASSETS COVERED	BENEFICIARY	ASSIGNEE	AMOUNT
Fire	Merchandise			
Fire	Buildings and Equipment			
Credit	Accounts and Bills Receivable			
Life	Endorsers or Executives			
Other Kinds				
			TOTAL	

SCHED. 1 -CASH, NOTES GIVEN FOR BORROWED MONEY, AND LIABILITY FOR ACCEPTANCES UNDER LETTERS OF CREDIT

DEPOSITARY BANKS	Cash Balance at Date of Statement	Line of Credit Received from Each	Amount Owing on Date of Statement: Notes	Acceptances	Securities, Endorsements or Guarantees given
OTHER SOURCES OF CREDIT					
(Note Broker)					
Total as per Balance Sheet					

If your Branches borrow locally, state amount owing not included in bills payable (Schedule 1) $

FIG. 3. (*Page 2*)

SCHEDULE 2 - NOTES AND ACCOUNTS RECEIVABLE

DESCRIPTION	Notes Receivable	Accounts Receivable
DUE FROM TRADE DEBTORS (Not including any item in "Other Debtors")		
For Merchandise Sold upon Regular Terms		
Accounts Receivable over Six Months Old or Past Due Notes		
TOTAL TRADE		
DUE FROM OTHER DEBTORS (Inter-Company, Controlled Companies, etc.)		
Officers, Directors, Stockholders or Employees		
Own Selling Houses or Branches		
Subsidiary Corporations		
Allied, Controlled or Affiliated Interests		
For Capital Stock Sold		
For Merchandise on Consignment		
Cash Advances (Security Therefor if Any $)		
Commissions Due and Payable		
Other Accounts and Notes Receivable		
TOTAL OTHER DEBTORS		
Less Reserves Created to Cover Possible Discount and Losses		
TOTAL AS PER BALANCE SHEET		
What Amount of Accounts or Notes receivable has been Discounted or Pledged?		

SCHEDULE 3 - INVENTORY (Should be taken at cost or market price - whichever is lower)

Taken 1/2 By

DESCRIPTION	AMOUNT
Finished Merchandise (How Priced*)	
Merchandise in Process (" ")	
Raw Material (" ")	
Supplies, etc.	
Other Items Included in Inventory	
TOTAL	
Less Reserve and Allowance for Merchandise of Obsolete Pattern or Otherwise not Readily Saleable	
TOTAL AS PER BALANCE SHEET	
What Amount is held by you under Trust Receipt?	
What Amount do you hold on Consignment (Included in Inventory?)	
What Amount has been Pledged as Collateral for Loans or Advances?	
What Amount has been priced at more than Cost?	
What is Amount of Unfilled Orders on Hand?	

SCHEDULE 4 - INVESTMENTS

DESCRIPTION OF SECURITY	No. of Bonds or Shares (1-14)	AMOUNT PLEDGED	PAR VALUE	BOOK VALUE	Income or Dividend Rec'd Last Year
TOTAL AS PER BALANCE SHEET					

SCHEDULE 5 - DEPOSITS OF MONEY

NAME OF DEPOSITOR	AMOUNT	MATURITY	Rate of Interest	Security, Endorsement or Guarantees
TOTAL AS PER BALANCE SHEET				

FIG. 3. (*Page 3*)

SCHEDULE 6 - ACCOUNTS PAYABLE

DESCRIPTION	AMOUNT
For Merchandise Purchased upon Regular Terms, Not Due	
" " " " " " " "	
Due Officers, Directors, Stockholders or Employees	
Other Accounts Payable	
TOTAL AS PER BALANCE SHEET	

SCHEDULE 7 - BONDED DEBT (Federal Reserve Bank Requirement)*

DESCRIPTION	Amount Authorized	Issued and Outstanding	Amount Pledged as Collateral to Loans	Maturity	Rate of Interest	TRUSTEE OR MORTGAGE

*Upon what Assets are the above described Bonds a lien?

Provision for Retirement

SCHEDULE 8 - REAL ESTATE (Please give full particulars of each parcel)

DESCRIPTION	LOCATION	OWNER OF RECORD	VALUE	MORTGAGES	EQUITY
		TOTAL AS PER BALANCE SHEET			

VERIFICATION If your books have been audited by a Certified Public Accountant state his name and date of Audit

CHARACTER OF BUSINESS (Federal Reserve Bank Requirement)

Describe briefly the character of Business you conduct

PURPOSE OF BORROWING (Federal Reserve Bank Requirement)

State whether the proceeds of Loans applied for or to be applied for are to be used

(A) For Investment in Securities, Lands, Plants, Buildings, Machinery, Improvements or equipment,

(B) In the Production, Manufacture and Distribution of Commodities of Agriculture, Industry or Commerce

MAXIMUM AND MINIMUM LIABILITIES

When did your Liabilities reach their Maximum last year 19 . Amount $

" " " " " " Minimum " " 19 . "

Have any of your Accounts been Assigned or Assets Pledged or is their any Lien upon them except as noted above?

N. B. It is most essential that each question be fully answered.

AFFIDAVIT

STATE OF } s. s.
COUNTY OF }

_____ being duly sworn deposes and says; that he is _____ of _____ the Corporation whose financial statement appears above, that he signed the said statement after reading it and the accompanying schedules, and that the same is in all respects a full, true and accurate statement of the financial condition of said Corporation on the _____ day of _____ 19 . Sworn to before me this _____ day of _____ 19

_____

FIG. 3. (*Page 4*)

CR.7 12M 5-25

Federal Reserve Bank of New York—Statement Form
CORPORATION.

STATEMENT OF _____

BUSINESS _____ ADDRESS _____

To _____ BANK OF _____

We make the following statement of **all the assets and liabilities** of this company at the close of business on the ____ day of ____ 192 ____ and give other material information for the purpose of obtaining advances on notes and bills bearing our signature or indorsement, and for obtaining **credit generally** on present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS.)

ASSETS	$	LIABILITIES	$
Cash on Hand and in Banks		Accounts Payable	
Accounts Receivable		Notes Payable to Banks	
Notes Receivable		Notes Payable to others	
Merchandise		Deposits	
Other Quick Assets (Itemize)		Other Current Liabilities (Itemize)	
Quick Assets		**Current Liabilities**	
Land and Buildings		Mortgages	
Machinery and Fixtures		Bonded Debt	
Other Assets (Itemize)		Other Liabilities (Itemize)	
		Capital Stock Preferred	
		Capital Stock Common	
		Surplus and Undivided Profits	
TOTAL	$	TOTAL	$

Merchandise. On what basis valued, cost or market? _____
Finished $_____ Unfinished $_____ Raw $_____
If any goods are on consignment, state amount and circumstances _____

Sales and Profit Last Fiscal Year. Net sales $_____
Net profit $_____ or Net Loss $_____
Other Income $_____ Dividends paid $_____

Accounts and Notes Receivable. State amounts and circumstances
(a) If any are past due or doubtful _____
(b) If any are pledged _____
(c) If any amounts are due from directors, officers, employees, subsidiaries, branches, or similar sources _____

Bonds and Stocks. State general character and whether readily salable at values stated _____

Insurance. Fire, on Buildings $_____ on Merchandise $_____ Life, in favor of company $_____

Contingent Liability. As indorser $_____
As guarantor $_____ No accounts or notes receivable have been sold, discounted or assigned with our indorsement or guarantee except as follows: _____

Accounts and Notes Payable. If any are past due, state amounts and circumstances _____

During last fiscal year current liabilities were at a maximum ($_____) on _____ and at a minimum ($_____) on _____

Mortgages and Bonds. State due dates of mortgages and on what assets a lien _____
State due dates of bonds and on what assets a lien _____

Are mortgages or bonds a lien on any current assets? _____
If any other liens on assets, state amounts and circumstances _____

Reserves and Depreciation. State what provisions are made _____

We hereby certify that the foregoing figures are taken from the books of this company and that they and the statements contained on both sides of this sheet are true and give a correct showing of the financial condition of the company as of the above date.

Signed this _____ day of _____ 192 Name _____

By _____
(State official title)

CONTINUE ON OTHER SIDE.

(OVER)

FIG. 4. Corporation Statement Form of N. Y. Federal Reserve Bank (*Face*)

OFFICERS		DIRECTORS
_____	President	_____ _____
_____	Vice-Pres.	_____ _____
_____	Treas.	_____ _____
_____	Secretary	_____ _____

In what state incorporated?_____

If company has any subsidiaries or branch offices, state locations and how accounts are handled_____

_____

_____

What is practice of company in regard to trade discounts?_____

_____

_____

Are books audited by a certified public accountant?_____Give date of last audit_____

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page.)

FIG. 4. (*Reverse*)

For some years bankers have required borrowers to furnish statements of their assets and liabilities. At first a **uniform statement** was not insisted on, but it was found that some borrowers were disinclined to submit full reports while others did not know what details the banker wanted. Individual banks thereupon compiled their own forms and furnished blanks to their customers. These blanks were by no means uniform, and since many borrowers used more than one bank, the diversity became a nuisance to both banks and borrowers. The former, in exchanging credit information with other banks, found comparisons difficult, and the latter were put to unnecessary trouble in arranging and rearranging their statements.

FORMS PREPARED BY BANKERS.—Finally an attempt was made through the various bankers' associations to formulate a uniform or standard blank which would embody the information most useful to banks. The form shown in Fig. 2 is that designed and officially **approved by the American Bankers' Association.**

A more recent form, prepared by the Irving Bank-Columbia Trust Co. of New York, one of the largest banking institutions in the country, is shown in detail in Fig. 3. This form follows the rules laid down by the Federal Reserve Board. A desirable innovation is found in this form in the provision for a **notary's certificate.** Together with other features which are designed to put the borrower squarely on record as to his actual assets and liabilities, this form is expected to furnish legal evidence sufficient to convict the borrower of fraud if it is shown subsequently that any material discrepancy exists between the statement and the facts.

FEDERAL RESERVE BOARD MODEL FORMS.—The Federal Reserve Board has issued **model forms.** These are for corporations, partnerships or individual owners, and individuals, respectively. The forms issued by the Federal Reserve Bank of New York are reproduced in Figs. 4 to 7.

Notice especially the manner in which the segregation of current assets from other assets is made; also the manner of arrangement of the liability side of

FEDERAL RESERVE BANK OF NEW YORK STATEMENT FORM
FIRM

STATEMENT OF

BUSINESS ADDRESS

TO BANK OF

We make the following statement of all the assets and liabilities of our firm at the close of business on the day of 192 and give other material information for the purpose of obtaining advances on notes and bills bearing our signature or indorsement, and for obtaining credit generally on present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS)

ASSETS		LIABILITIES	
Cash on hand and in Banks		Accounts Payable	
Accounts Receivable		Notes Payable to Banks	
Notes Receivable		Notes Payable to Others	
Merchandise		Deposits	
Other Quick Assets (Itemize)		Other Current Liabilities (Itemize)	
Quick Assets		Current Liabilities	
Land and Buildings		Mortgages	
Machinery and Fixtures		Other Deferred Liabilities (Itemize)	
Other Assets (Itemize)		Current and Deferred Liabilities	
		Net Worth	
TOTAL		TOTAL	

Merchandise. On what basis valued cost, or market

Finished $ Unfinished $ Raw $

If any goods are on consignment, state amount and circumstances

Sales and Profit Last Fiscal Year. Net Sales $

Net Profit $ Net Loss $

Other Income $ Withdrawals $

Accounts and Notes Receivable. State Amounts and circumstances

(a) If any past due or doubtful

(b) If any are pledged

(c) If any amounts are due from members of the firm, employees, branches or similar sources

Bonds and Stocks. State general character and if readily salable at value stated

Insurance. Fire, on Buildings $ Merchandise $ Life, in favor of firm $

Contingent Liability. As indorser $

As guarantor $ No accounts or notes receivable have been sold, discounted or assigned with our indorsement or guarantee except as follows:

Accounts and Notes Payable. If any are past due state amount and circumstances

During last fiscal year current liabilities were at maximum ($) on and at a minimum ($) on

Mortgages and Other Liens. State due date of mortgages and on what assets a lien

Is mortgage a lien on any current assets?

If any other liens on assets, state amount and circumstances

Reserves and Depreciation. State what provision is made

We hereby certify that the foregoing figures are taken from the books of our firm and that they and the statements contained on both sides of this sheet are true and give a correct showing of our financial condition as of the above date.

Signed this day of 192 Firm Name

By

Member of Firm

(OVER)

FIG. 5. Partnership Statement Form of N. Y. Federal Reserve Bank (*Face*)

DATE OF PARTNERSHIP——— DATE OF EXPIRATION———

GENERAL PARTNERS			SPECIAL PARTNERS		
NAME	Amount Contributed	Net Worth Outside this business	NAME	Amount Contributed	Partner Until

If the firm has any branch offices state location and how accounts are handled———

If the firm or any member is connected with any other business, state nature of the business and extent to which interested———

What is the practice of the firm in regard to trade discounts?———

Are books audited by a certified public accountant?——Give date of last audit———

Location and Description of Land Owned	Estimated Value	Assessed at	Mtgd. for	Insured for

Title. The legal and equitable title to all pieces of above described real estate is solely in the name or names of one or more of the members of the firm, except as follows:———

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page.

FIG. 5. (*Reverse*)

the balance sheet. The forms also contain a **detailed questionnaire.** Space is given on each form to the important matter of **contingent liabilities.**

FORM RECOMMENDED BY THE NATIONAL ASSOCIATION OF CREDIT MEN.—The form recommended and indorsed by the National Association of Credit Men (Fig. 8) does not differ materially from that used by bankers, but the exact form is of interest to those who are anxious to ascertain the point of view of men to whom reports are frequently addressed. Preceding the form is the following pertinent observation: "Large assets are not always necessary to the creation of credit. What is most desirable, is that credit be in relative proportion to the actual assets. The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times."

As in the case of the forms of statements asked for by bankers, so the credit men's form indicates the business man's desire, when surveying a financial situation, to have the assets stated in the order of their availability, starting with the most liquid, and the liabilities in the order of urgency as to payment.

It is evident from the phraseology and arrangement of the form of statement recommended by the National Association of Credit Men, that **reserves for doubtful accounts** properly are intended to be deducted from receivables before

Federal Reserve Bank of New York—Statement Form
INDIVIDUAL

Statement of _____ **Merchant, Manufacturer Etc.**

Business _____ Address _____

To _____ Bank of _____

I make the following statement of all **my assets and liabilities at the close of business on the** _____ **day of** _____ **192**__ and give other material information for the purpose of obtaining advances on notes and bills bearing my signature or endorsement, and for obtaining credit generally upon present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS)

ASSETS	$	LIABILITIES	$
Cash on Hand and in Bank		Accounts Payable	
Accounts Receivable		Notes Payable to Bank	
Notes Receivable		Notes Payable to Others	
Merchandise		Other Current Liabilities (Itemize)	
Other Quick Assets (Itemize)			
Quick Assets		**Current Liabilities**	
Land and buildings (see Schedule on back)		Mortgages	
Machinery and Fixtures		Other Liabilities (Itemize)	
Other Assets (Itemize)			
		Net Worth	
TOTAL	$	TOTAL	$

Merchandise. On what basis valued, cost or market?
Finished $_____ Unfinished $_____
Raw $_____ If any goods on consignment, state amount and circumstances

Do you take advantage of all cash discounts

Sales and Profit Last Fiscal Year. Net Sales $

Net Profit $_____ or Net Loss $_____
Other Income $_____ Withdrawals $ _____

Accounts and Notes Receivable. State amounts and circumstances:
(a) If any are past due or doubtful
(b) If any are pledged
(c) If any are due from employees, relatives or similar sources

Bonds and Stocks. State general character and if readily salable at values stated

Insurance. Fire, on Buildings $_____
Merchandise $_____ Life $_____
Who is Beneficiary

Contingent Liability. As indorser $_____
As guarantor $_____ No accounts or notes receivable have been sold, discounted or assigned with my endorsement or guarantee except as follows:

Accounts and Notes Payable. If any are past due state amounts and circumstances

Current Liabilities. During last fiscal year, current liabilities were at a maximum ($_____) on _____ and at a minimum ($_____) on _____

Mortgages and Other Liens. State due dates of Mortgages and on what assets a lien

Are mortgages a lien on any current assets? If any other liens on assets, state amounts and circumstances

Age. My age is _____ Date started present business

Audits. Are books audited by a certified public accountant? _____ Give date of last audit

I hereby certify that the foregoing figures are taken from my books and that they and the statements contained on both sides of this sheet are true and give a correct showing of my financial condition, as of the above date.

Signed this _____ day of _____ 192 Name _____
Proprietor.

CONTINUE ON OTHER SIDE.

FIG. 6. Individual's Statement Form of N. Y. Federal Reserve Bank (*Face*).

Location of Land Owned	Acres	Estimated Value	Assessed At	Mortgaged For	Insured For

Title. The legal and equitable title to all pieces of above described real estate is in my name solely, except as follows:

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page.)

FIG. 6. (*Reverse*)

stating the amount or value thereof, and that **depreciation reserves** are likewise to be deducted from the assets to which they apply, and the net value of such assets entered in the statement.

The importance to the grantor of credit of knowing whether or not any of the assets have been hypothecated or are encumbered by liens of any description, is evident from the statement. Bitter experience has taught credit men that this is one of the most vital elements involved in a credit situation.

FORMS ISSUED BY DUN'S AND BRADSTREET'S.—To complete the presentation of the forms in general use throughout the United States, the ones issued by two leading mercantile agencies will be next considered. Bradstreet's is presented in Fig. 9, and Dun's in Fig. 10. These forms are supplied to practically every business concern, and are therefore more familiar to the average business man than any others. The arrangement of these forms is not ideal and the information which may be gathered from them falls far short of that supplied in forms used by the bankers' and credit men's associations. It is possible that the agencies do not feel at liberty to request a statement as full as the others, but it is obvious that their forms could be improved without seriously affecting their chances of securing information.

It has been suggested that the mercantile agencies, in addition to requiring information on their own forms, call for financial statements certified to by professional auditors. It would be entirely feasible to assign preferential ratings to concerns which furnish satisfactory audited statements. The mercantile agencies would assume no more risk than they now incur; credit grantors would secure information vastly more trustworthy than that which is usually furnished; and the concerns which furnish the audited statements would properly benefit, as compared with the concerns which would not or could not submit their accounts to the scrutiny of independent and disinterested auditors.

BALANCE SHEET OF AN INDIVIDUAL.—The balance sheet of an individual should contain all the individual's assets and liabilities. When an

☞Please answer all questions and fill in all blanks — Federal Reserve Bank of New York-Statement Form

Statement of _____ FARMER

Business _____ Address _____

To _____ Bank of _____

I make the following statement of all my assets and liabilities at the close of business on the date named below and give other material information for the purpose of obtaining from you advances on notes and bills bearing my signature or endorsement and for obtaining credit generally upon present and future applications.

☞CONDITION AT CLOSE OF BUSINESS ON THE _____ DAY OF _____ 192__

	ASSETS	$		LIABILITIES	$	
1	Cash on hand and in banks					
2	Livestock—Horses and Mules (No.)					
	Cattle (No.)					
	Sheep (No.)					
	Hogs (No.)					
	Poultry (No.)					
	(No.)					
3	Farm products on hand					
4	Growing Crops					
5	Other materials or supplies					
6	Accounts due me — Good					
7	Loans due me — Unsecured — Good					
8	Mortgage Loans due me — Good					
9	Other secured loans due me — Good					
10	Farm — Land, buildings and improvements					
11	Farm implements, machinery and wagons					
12	Automobiles and motor trucks					
13	Stocks, bonds and other securities					
14	Cash Surrender value, Life Insurance-Not Borrowed Against					
15						
16						
17						
	TOTAL	$		TOTAL	$	
				UNSECURED DEBTS:		
18				Accounts owed by me	$	
19				Notes owed by me to banks—Without Security		
20				Notes owed by me to others—Without Security		
21				Unpaid taxes, rent or interest		
22						
23						
24						
				MORTGAGES:		
25				Notes or Mortgages owed by me to banks—Secured by Real Estate		
26				Notes or Mortgages owed by me to others—Secured by Real Estate		
27						
28						
				OTHER SECURED DEBTS:		
29				Notes or Mortgages owed by me to banks—Secured by Chattels		
30				Notes or Mortgages owed by me to others—Secured by Chattels		
31				Notes owed by me to banks—With Security (Except Mortgages)		
32				Notes owed by me to others—With Security (Except Mortgages)		
33						
34						
				Total Liabilities		
35				Net Worth		
				TOTAL	$	

36 Contingent liability: As Endorser $; As Guarantor $; As Bondsman for others $; (Other) $

GIVE DETAILS OF ABOVE ASSETS AND LIABILITIES AGAINST CORRESPONDING NUMBERS

ASSETS

1 Names of banks

3 Show principal items: $; $; $; $

$; $; $; $

4 Actual outlay to date: Labor $; Seed $; Fertilizer $; (Other) $; Total $

5 Show principal items

6 Give important details

7 Amount maturing within one year from statement date $ Past due $

8 Amount maturing within one year from statement date $ Past due $

9 Amount maturing within one year from statement date $ Past due $

10	LOCATION OF LAND OWNED AND DESCRIPTION OF IMPROVEMENTS AND BUILDINGS	Total Acres	Acres Cultivated	Acres Woodland	Year Purchased	COST	ESTIMATED VALUE Land	ESTIMATED VALUE Improvements and Buildings	TOTAL ASSESSED VALUE	MORTGAGED FOR	FIRE INSURANCE
a						$	$	$	$	$	$
b											
c											
d											
e											
	TOTALS					$	$	$	$	$	$

Title: The legal and equitable title to all the above described land, improvements and buildings, is in my name solely, except as follows:

If you lease land from others, state location, acreage, terms of rental and use

If you lease land to others, state location, acreage, terms of rental and use

Continue on other side (Over)

FIG. 7. Farmer's Statement of N. Y. Federal Reserve Bank (*Face*)

☞ Please answer all questions and fill in all blanks

GIVE DETAILS OF ABOVE ASSETS AND LIABILITIES AGAINST CORRESPONDING NUMBERS (Continued)

ASSETS: (Continued)

11 | Show principal items: ..... $ ..... : ..... $ ..... : ..... $ ..... : ..... $ ..... : ..... $ .....

12 | Show principal items: ..... $ ..... : ..... $ ..... : ..... $ ..... : ..... $ ..... : ..... $ .....

13	NAMES OF STOCKS, BONDS AND OTHER SECURITIES	NUMBER OF SHARES	TOTAL PAR VALUE	TOTAL MARKET VALUE
			$	$
		TOTALS	$	$

15 .....

16 .....

17 .....

LIABILITIES

18 | Give Important Details ..... Past Due $ .....

19 | Amount Maturing within One Year from Statement Date $ ..... Past Due $ .....

20 | Amount Maturing within One Year from Statement Date $ ..... Past Due $ .....

21 | Local Taxes $ ..... State Taxes $ ..... Federal Taxes $ ..... Rent $ ..... Interest $ .....

22 .....

23 .....

24 .....

25 | Describe .....

26 | Describe .....

27 .....

28 .....

29 | Describe .....

30 | Describe .....

31 | Amount Maturing within One Year from Statement Date $ ..... Past Due $ .....

32 | Amount Maturing within One Year from Statement Date $ ..... Past Due $ .....

33 .....

34 .....

35 | Net Worth about a Year Ago (Give Date) ..... 192..... $ .....

36 .....

LIFE INSURANCE $ ..... Beneficiary .....

FIRE INSURANCE other than on Buildings and Improvements: on ..... $ ..... : on ..... $ .....

on ..... $ ..... : on ..... $ ..... : on ..... $ ..... : on ..... $ .....

OTHER INSURANCE (Specify Kind) ..... on ..... $ ..... : on ..... $ ..... : on ..... $ .....

..... on ..... $ ..... : on ..... $ ..... : on ..... $ .....

My Age is ..... Married or Single .....

Are you a Partner in any Firm? (Give Name, Address, other details): .....

Are there any Judgments unsatisfied, or suits pending against you? (Give Details and Amounts): .....

Other liens on assets—describe and give amounts .....

Space for further explanation of any of above items; or any additional information:

I hereby certify that the Figures, Information and Statements contained on both sides of this sheet, all of which have been read by me before signing, are true and give a correct showing of my Financial Condition on the date above stated.

Signed this ..... day of ..... 192..... Name .....

FIG. 7. (*Reverse*)

"Large assets are not always necessary to the creation of credit; what is most desirable is, that credit be in relative proportion to the actual assets

PROPERTY STATEMENT

OF

TO

"The giver of credit is a contributor of capital, and becomes, to a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times."

Form Adopted and Recommended by the National Association of Credit Men

For the purpose of obtaining merchandise from you on credit, I (we) make the following statement in writing, intending that you should rely thereon respecting my (our) financial condition as of (Date)_____ 19____

(All questions should be answered. When no figures are inserted, write word "None.")

ASSETS			LIABILITIES		
Cash in hand			For MERCHANDISE:		
Cash in bank			Accounts owing not due		
Accounts owing by customers, good and collectible, not pledged or sold			Accounts owing past due		
Notes owing by customers, good and collectible, not pledged or sold			Trade Acceptances payable		
Trade Acceptances receivable			Notes payable for Mdse.		
Merchandise: (not on consignment or conditional sale.) (How valued—Cost____ Market.)			For BORROWED MONEY:		
			Notes payable to banks		
			Notes or debts payable to others (including relatives and friends)		
Other quick assets:			Trade Acceptances discounted or sold		
(Describe)			Customers' Notes discounted or sold		
			Deposits of money with us. (Describe)		
TOTAL QUICK ASSETS			Owing for Wages and Salaries		
			Owing for Taxes (city, state and federal)		
Machinery. (How valued____Cost____ Depreciated)			Owing for Rental		
Fixtures and other Equipment. (How valued____Cost____Depreciated)			Owing for Insurance Premiums		
			TOTAL QUICK LIABILITIES		
Land and Buildings as described below					
			Debt secured by mortgage on land or buildings		
			Debt secured by chattel mortgage or other liens		
Notes and Accounts owing from members of firm, employees, or others not customers			Debt secured by judgment		
			Other liabilities: (Describe)		
Other assets: (Describe)					
			TOTAL LIABILITIES		
			NET WORTH { *Capital Stock { Preferred / Common; Surplus and Undivided Profits		
TOTAL ASSETS			TOTAL		

What books of account do you keep?_____

Was this statement made from those books?_____ Do you keep cost records?_____

Do you sell or pledge your accounts to creditors, banks, finance companies or others?_____ If so, what amount is so sold or pledged? $_____ What amount of your accounts have you sold or pledged during the past twelve months? $_____

Are any creditors secured by mortgage or lien of any sort?_____ If so, how?_____

Are any claims in attorneys' hands or suits against you?_____

Have you merchandise on consignment or conditional sale?_____ If so, what amount? $_____

If business property is leased, for what term and what rental?_____

Name and locality of your bank or banks_____

Location and kind of business_____ How long there?_____

Previous business experience_____ Where_____

Is your business incorporated?_____ If so, under laws of what state?_____

It is important that every question on **both sides of this sheet** be correctly answered and that the blanks be carefully filled in. In answering questions involving amounts write the word "none" where figures do not apply. You will find it advantageous to keep a copy of this statement for comparison with the showing you will be able to make a year hence.

*Capital stock item to be filled out only by corporations.

FIG. 8. National Association of Credit Men's Form of Statement (*Face*)

Machinery and Equipment held under Conditional Sale or Lease Contract _____

Debt on Conditional Sale or Lease Contract _____ (Payable $_____ per mo. _____

INSURANCE

On Merchandise $_____ On Buildings $_____ Machinery $_____ Fixtures $_____

Other Equipment $_____ Employers' liability $_____

Is any insurance assigned? _____ What amount? _____ To whom? _____

Amount of life insurance for benefit of business $_____ Do you carry Fidelity Bonds? _____

In what companies (fire, life, etc.) _____

SUMMARY OF PROFIT AND LOSS

Inventory of Mdse. beginning of fiscal year (not including fixtures or equipment)			Sales last fiscal year		
			Income from all other sources		
Cost of Mdse. purchased during the year			Inventory of Mdse. at close of year		
			Total Income for year		
General expenses including salaries, losses, etc.			Less Total Expenses		
TOTAL EXPENSES			NET PROFIT FOR YEAR		

RECORD OF LAND AND BUILDINGS

Title in name of	Description and location	Book value	Assessed value	Amount of Encumbrances	To whom

BUY PRINCIPALLY FROM THE FOLLOWING CONCERNS

Names	Addresses	Amount Owing	
		Open Account	Notes

Names and Addresses of Partners, or if Corporation, of Officers _____

REMARKS:

The foregoing statement has been carefully read (both printed and written matter) and is in all respects complete, accurate and truthful. It discloses to you the true state of my (our) financial condition on the date above stated. Since that time there has been no material unfavorable change in my (our) financial condition; and if any such change takes place I (we) will give you notice. Until such notice is given, you are to regard this as a continuing statement.

Name of Individual, Firm or Corporation _____

Signed by _____

Street _____ Town _____ State _____

Date of signing statement _____ 19___

FIG. 8. (*Reverse*)

63—Statement of Incorporated Co.

SENT OUT..... No..... RETURNED.....

BUSINESS ESTABLISHED 1849.

THE BRADSTREET COMPANY,

INCORPORATED.

Executive Offices, 346 and 348 Broadway, New York.

OFFICES IN THE PRINCIPAL CITIES OF THE UNITED STATES, CANADA, CUBA, MEXICO, AUSTRALIA, AND IN LONDON, ENGLAND, WITH AN ESTABLISHED LIST OF CORRESPONDENTS THROUGHOUT THE CIVILIZED WORLD.

NEW YORK OFFICE—346 and 348 Broadway.

NEW YORK CITY,.....192

M.....

.....

We respectfully request that you furnish us a statement of your financial condition, on the within form, in such detail as you may elect, with a view to insure the correctness of our report. By so doing the chances of error will be lessened and confidence inspired in the minds of grantors of credit.

Those of whom you buy must get information regarding your responsibility, and employ The Bradstreet Company to make the necessary investigation. That we may be better enabled to serve them and yourself is the sole object in making this request.

We ask such attention as the subject deserves.

THE BRADSTREET COMPANY.

7-20-'21 5m

Per..... .....

FIG. 9. Bradstreet's Form of Statement (*Page 1*)

63—Statement Incorporated Co.

Date.....19....

Statement made by.....

Corporate Style.....

Business.....

Where located—

NAME OF CITY OR VILLAGE.....

COUNTY.....

STREET AND NUMBER.....STATE.....

Date of Charter.....

Incorporated in what State.....

Commenced when.....

Succeeding whom.....

.....

OFFICERS.

Full Given and Surnames.	*Residence.*
President.....	.....
Vice-President.....	.....
Secretary.....	.....
Treasurer.....	.....
Manager.....	.....

DIRECTORS.

Full Given and Surnames.	*Residence.*
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

FIG. 9. (*Page 2*)

CAPITAL

	Authorized	*Subscribed*	*Paid in*
Common Stock,	$	$	$
Preferred Stock,	$	$	$
How Paid in:			
In cash,	$		
Patents, trade-marks, patterns, etc.,	$		
In other property,	$	$	$

Give particulars and the value of each kind of property

ASSETS, 19

Cash in bank,	$
Cash on hand,	
Notes receivable, actual value,	
Accounts receivable, actual value,	
Merchandise (finished and unfinished),	
Raw Material,	
Machinery and fixtures,	
Real Estate,	
Other investments (specify)	
TOTAL ASSETS,	$

How much, if any, of above Accounts Receivable have been assigned or pledged for loans, $

LIABILITIES, 19

Capital stock paid in,	$
Surplus and undivided profits,	
Bills payable,	
Accounts payable,	
Bonded debt,	
Mortgage on real estate (not included as Bonded debt),	
Chattel mortgage on all kinds of property,	
Borrowed money from banks (not included above),	
" " " individuals (not included above),	
All other liabilities,	
TOTAL LIABILITIES,	$

How much, if any, of the above indebtedness is past due, $

OVER

FIG. 9. (*Page 3*)

Amount of annual business, - - - - - - - - - $.....

Amount of annual expenses, - - - - - - - - - $.....

Annual dividend.....

Surplus (not including undivided profits), - - - - - - $.....

Indebtedness of company to stockholders included in liabilities.....

Amount of insurance on merchandise, - - - - - - - $.....

Amount of insurance on buildings and plant, - - - - - $.....

Ever had a fire; if so, give particulars.....

.....

.....

Is plant protected by automatic sprinklers.....

Other interests of *principal* directors.....

.....

.....

Bank with.....

TRADE REFERENCES FROM WHOM PRINCIPAL PURCHASES ARE MADE.

Give Address of Each.	*Amount Owing*
Name.....	$.....
Address.....	
Name.....	$.....
Address.....	
Name.....	$.....
Address.....	
Name.....	$.....
Address.....	
Name.....	$.....
Address.....	
Name.....	$.....
Address.....	

REMARKS.

.....

.....

.....

.....

.....

Sign here.....

Official Signature.

FIG. 9. (*Page 4*)

FOR THE PROMOTION AND PROTECTION OF CREDIT

ESTABLISHED 1841

R. G. DUN & CO.

THE MERCANTILE AGENCY

Dun Building, 290 Broadway, New York City

Branch Offices in the Principal Cities of the World

New York,.....19.....

"Statements" as an Aid in Determining Credits

"A WELL MANAGED CREDIT amounts to ten fold the funds of a merchant: And he gains as much by his credit as if he had ten times as much money. This maxim is generally received among all merchants. Credit, therefore, is the greatest wealth to everyone who carries on commerce." In commercial countries the use of credit in the place of money vastly exceeds the use of money. Goods sold and delivered in exchange for promises to pay money vastly exceed in value goods sold and delivered in exchange for money.

In a credit transaction it is the right of one party to receive and the duty of the other to give information sufficient to enable the one proposing to become a creditor to form an intelligent opinion as to the probable ability of the one proposing to become a debtor to fulfill his promise to pay. The object of THE MERCANTILE AGENCY is to obtain and communicate information relating to the amount of credit which one party to a credit transaction may prudently give and the other party may prudently accept. The disaster to one through accepting too much may be greater than the disaster to the other through giving too much. The usefulness to both the two classes of parties of their availing themselves of the service of THE MERCANTILE AGENCY for that purpose has been proved by their experience through all the years since 1841.

These are the grounds upon which we respectfully make application for the information indicated by the form of this "Statement," a statement which it is our intention to communicate to such of our subscribers as may have occasion to consider the subject of credit transactions between the maker of the statement and themselves. The usefulness of such statements to those who make them has been so abundantly proved by experience that the making of them has become the common practice. That usefulness is found not only in the obtaining of credit, but in the warning not to accept credit too much in amount or maturing at times when there may be an inability to pay. Statements made upon the results of a careful examination of things as they really are and under a disposition to avoid the common error of an overvaluation of assets are protective to debtor and creditor alike.

Information not expressly called for by this printed form, which may serve to prove or indicate the degree of probable accuracy of figures, or which should be considered both by him who gives and him who accepts credit, is requested, and may be stated in a paper attached to the form and identified by a signature and date. It is recommended that a copy of the Statement be placed upon the files of the person who makes it.

R. G. DUN & CO.

FIG. 10. Dun's Form of Statement (*Page 1*)

STATEMENT—Form D (N. Y.) MERCANTILE CORPORATION

STATEMENT AS A BASIS FOR CREDIT MADE TO

THE MERCANTILE AGENCY

R. G. DUN & CO.

By.....a Corporation,
Engaged in.....Business
At..... County of.....State of.....
Date to which all the items of the statement relate.....19.....

When incorporated.....Under laws of.....
Succeeding.....
Authorized Capital Stock, $.....No. of shares: preferred.....common.....Par value, $.....
Amount of Capital Stock subscribed, $.....Amount paid in (IN CASH), $.....
Amount paid in otherwise than cash and how, $.....
.....
Limit of indebtedness allowed, $.....Bonded debt, $.....drawing interest at.....per cent.
Bonds secured by.....Is there a sinking fund?.....

ASSETS. {Where no figures are entered use the word NONE}		LIABILITIES. {Where no figures are entered use the word NONE}	
Merchandise on hand at cash value,	$	For merchandise (open account),	$
Value of fixtures,		For merchandise (notes payable),	
Accounts receivable at realizable value,		Loans from bank,	
Notes receivable at realizable value,		Loans from other sources,	
Cash on hand,		Mortgages on real estate,	
Cash in bank,		Other obligations,	
Real estate and buildings owned by Co.		Capital stock issued,	
Other assets consisting of.....		Surplus in use as Capital,	
.....		Undivided profits,	
Total assets,	$	Total,	$

Any past due indebtedness, and if any, how much? $.....
If any of the above accounts are pledged, state the amount, $.....
Are there any existing liens on personal property not mentioned above? If so, what?.....
.....
Contingent liabilities upon bills of exchange, endorsements, guarantees, etc., $.....
.....
Annual business amounts to $.....Bank with.....
Do you keep books of account of the business?.....
If so, name them.....
Is the statement of value of stock on hand made upon the basis of an inventory actually taken? And if so, on what date?.....
What in your opinion is the total amount of your assets and of your liabilities as they are at the date of signing this statement? Total assets, $.....Total liabilities, $.....
FIRE PROTECTION: State its general nature—public fire department, sprinkler system, fire extinguishers, night watchman, etc.
.....
INSURANCE: On Merchandise, $.....On Buildings, $.....
Did you ever suffer a fire loss?.....If so, where and when?.....
Did fire originate on your premises?.....
Do you carry employer's liability insurance?.....
OFFICERS: President,.....Vice-President,.....
Secretary,.....Treasurer,.....Gen'l Manager,.....
Names of Directors:.....
.....
Date of signing statement.....19.....
.....
Sign name of corporation here.

OVER Signed by

FIG. 10. (*Page 2*)

IMPORTANT

Kindly give the names of a few houses from whom you make your largest purchases.

NAME	STREET ADDRESS	CITY AND STATE	AMOUNT OWING

BANK WITH:

OTHER REFERENCES:

FIG. 10. (*Page 3*)

individual conducts an enterprise as a **sole proprietor** and keeps its affairs separate so far as possible from the rest of his affairs, a balance sheet of the enterprise alone is often desired. In such a case the heading of the balance sheet should show clearly that it is a balance sheet of the enterprise alone and not of the individual as an entity. Since a business conducted by an individual as a sole proprietor is not a legal entity distinct from the entity of the individual the balance sheet of such a business may be of little real significance, or actually misleading, if it does not contain a reference to significant assets or liabilities of the individual not included in the assets and liabilities of the business.

BALANCE SHEET OF A PARTNERSHIP.—Although a partnership usually is not a legal entity distinct from the separate entities of the individuals of which it is composed, the balance sheet of a partnership usually contains only the assets and liabilities of the partnership under the partnership agreement with no reference to the other assets or liabilities of the individual partners. Opinions differ as to how much, if any, information relative to the so-called private financial affairs of individual partners should be given in the balance sheet of a partnership.

CORPORATION BALANCE SHEET.—Since a corporation is a distinct entity authorized by law its financial affairs should not be confused with the affairs of those who control it and its balance sheet should contain only its own assets and liabilities; but where a corporation controls one or more corporations through stock ownership **consolidated balance sheets** are often required to show the combined assets and liabilities of the group with inter-company assets and liabilities eliminated. The rule as to the separation of corporate and personal entities is subject to modification when the relations in fact nullify the fiction of separate entities. An advance or loan to the controlling stockholder of a corporation may or may not be an "account receivable." Usually

it is not. It is bad business practice to use a corporate entity to conceal questionable transactions. When there is any doubt about the financial standing of an individual, he should be required to submit a consolidated statement of all his interests. If he takes the position that individual and corporate balance sheets cannot be merged, he is admitting that something is wrong. They can be merged.

BALANCE SHEETS OF TRUSTS.—Balance sheets of trusts, estates, etc., are based on the same principles as balance sheets of individuals, partnerships and corporations, except as they are **affected by laws relating to "corpus" and "income."**

Assets

CASH.—Cash should include all money, good checks, drafts, money orders, etc., owned and available for current needs and all balances in depositories subject to withdrawal on order. Cash owned but not immediately available should be shown separately if the amount is important. **Overdrafts** should be shown as liabilities or used to reduce cash on hand in other depositories according to the circumstances. **Bank balances** are almost invariably shown at amounts remaining after deducting outstanding checks. **Foreign money,** bank balances, etc., should be valued at market if below cost.

ACCOUNTS RECEIVABLE.—Accounts receivable which may be included in current assets consist of amounts which (1) fall due, or, if past due, which will be collected, within a reasonably short period (usually within a year at least), (2) arise from transactions which have been completed at the date of the balance sheet, (3) are not represented by notes or other similar instruments, and (4) are reasonably definite and not of the nature of claims.

Accounts receivable **should be classified** on the balance sheet to show separately (1) those resulting from the ordinary operations of the business, (2) those due from stockholders, officers, or employees, (3) those due from affiliated companies, and (4) those due on account of loans not covered by notes, etc.

For balance sheet purposes accounts receivable should be valued at the amount estimated to be collectible. Worthless accounts should not be included and the amount of the remaining accounts should be reduced by **reserves for doubtful accounts, discounts,** etc. Accounts receivable which do not fall due within a year's time should be shown separately and not as a current asset, unless otherwise governed by a recognized trade custom.

NOTES, BILLS AND ACCEPTANCES RECEIVABLE.—The principles of classification and valuation described for accounts receivable are applicable to notes, acceptances and bills receivable. When paper of this sort which has been discounted is outstanding the amount may be shown both as an asset and as a liability or it may be shown in a footnote.

ACCRUED ASSETS.—Interest, rent, etc., not due may be accrued to the date of the balance sheet and **included in current assets or elsewhere** according to the due date.

ADVANCES, DEPOSITS, ETC.—Advances, deposits, etc., which are **returnable within a year's time** or which have been made for current requirements may be included under current assets. Advances which are **not returnable within a year's time** or which are for fixed assets or other long-term investments should not be included under current assets.

SUBSCRIPTIONS TO CAPITAL STOCK.—Subscriptions to capital stock should be shown separately and should be classified as current assets or otherwise according to conditions. The due dates are of great importance. If such subscriptions are shown under assets the corresponding amount of capital stock should be shown as capital stock subscribed.

CLAIMS RECEIVABLE AND OTHER CONTINGENT ASSETS.—Claims receivable involving important amounts should never be shown on a balance sheet as accounts receivable unless proceedings have advanced to a point where the claim has the status of a liquidated account.

Contingent assets are those which have not been reduced to definite money values; if shown on a balance sheet they are not included in the aggregate valuation of the assets. In nearly all active business concerns claims exist which are in dispute. Taxes may be overpaid, damages may be claimed for infringement of patents or for failure to fulfil the terms of contracts. When important enough, mention thereof should be made on balance sheets.

LIFE INSURANCE POLICIES.—The **cash surrender value** of a life insurance policy and any **prepaid premium** may be included, separately, under current assets. The practice of treating the full amount of premiums paid on a life insurance policy as an asset is not sound.

PREPAID EXPENSES AND DEFERRED CHARGES.—Prepaid expenses and deferred charges, on an accrual basis of accounting, are written off over the period to which they apply and are shown on the balance sheet at the amounts which apply to future periods. Prepaid expenses which are properly chargeable to operations within a year from the date of the balance sheet may be treated as current assets. Payments for services which are to be rendered in the future should be treated as prepaid expenses but payments for services which have been rendered in the past should not be considered as prepaid expenses unless definitely determinable benefits will be derived therefrom in the future. Important differences in the nature of prepaid expenses and deferred charges should be disclosed.

INVESTMENTS.—Investments in stocks, bonds, etc., which can be readily liquidated at a determinable amount and which can be used for current needs of the business may be included in current assets, in which case they should be valued on the basis of **"cost or market, whichever is lower,"** or at least the market value should be indicated. Where there is a definite market for such securities at definite prices, there can be no objection to a valuation at market, even if above cost, provided the basis is noted. Valuing at market is a practice sometimes followed by dealers in securities.

Investments of any kind which cannot be readily liquidated and used for the current needs of the business should not be included in current assets. Such investments should be valued at cost unless there has been a radical and permanent change in conditions which makes a revaluation advisable. In the case of bonds and other similar investments cost may be adjusted for accrued amortization of discount or premium. The market value is often shown in a parenthetical note beside the description of the item.

INVENTORIES.—The term "inventory" as used in balance sheets, unless otherwise specifically indicated, should refer only to raw materials, goods in process, finished goods, merchandise, supplies, and other similar property owned by the concern and which are to be sold or to be consumed in the production of articles to be sold. Sometimes certain portions of a concern's inventory do not constitute current assets. Such portions should be shown separately from current assets on the balance sheet.

A common classification of inventories of an industrial concern for balance sheet purposes is (1) raw materials and supplies, (2) work in process, and (3) finished product.

Inventories are commonly valued for balance sheet purposes on the basis of **"cost"** or **"cost or market, whichever is lower."** Both bases are approved for federal income tax computations. "Cost" consists of the cost of material, labor and expenses applicable to the acquisition or production of the particular articles. Administrative and selling expenses, interest, etc., should not be treated as a part of "cost." "Market" usually means replacement cost in the case of raw materials and replacement cost or net value based on selling prices, whichever is lower, in the case of goods in process and finished goods. On either basis obsolete and other similar stocks should not be valued at more than they are expected to realize.

If the basis of "cost or market, whichever is lower" is used it should be applied separately to each item in the inventory.

Under the **retail method** inventories are valued by deducting from selling prices percentages representing selling expenses, profit, etc. This is the best method for department stores, chain stores and similar businesses. This method is approved for federal income tax computations.

Under the **base stock, normal stock** or **cushion method** certain parts of the inventory are carried at normal or nominal prices. Usually the part of the inventory so treated is a normal or a minimum quantity of the principal goods or materials handled and the prices are usually fixed low enough so that a loss will not have to be taken as a result of a downward fluctuation in the market.

This method is used by some concerns, dealing in basic commodities, which are obliged to keep large normal or minimum stocks on hand at all times. As stocks are sold and replenished on a rising market their value on the basis of "cost" or "cost or market" whichever is lower increases or is inflated and when the market declines there is a corresponding decrease or deflation. But if stocks are valued on the basis of so-called normal prices there is no inflation or deflation in the statement of financial condition. If properly carried out and if used under the right circumstances this method has decided merit. It is not, however, allowed by the Treasury Department in computing federal income taxes.

The object in the valuation of inventories for ordinary balance sheet purposes should be to include no unrealized profit and to anticipate losses which are reasonably certain. The basis of inventory valuation is often noted in the balance sheet. In the absence of such a notation there is no rule by which it can be assumed what the basis of valuation is.

Ordinarily it is not good practice to set up surplus reserves for inventory losses. In theory, the best practice it to write down all inventories, including goods to arrive, to market prices. This practice is not advocated unless the so-called market prices are reasonably stable. The result is not accomplished by setting up a reserve for possible loss out of general surplus. The greatest objection is that charges against such reserves do not appear at any time as charges against income.

If it is believed that a permanent decline has taken place, the amount written down belongs in the income account. If the decline is believed to be temporary, it obscures the picture to merely segregate part of surplus.

SINKING FUNDS AND OTHER RESTRICTED ASSETS.—Assets or "funds," the use of which is restricted, constitute current assets only if they can be used for current purposes. Where restrictions may have an important bearing on the financial condition, the assets involved should be shown separately

and described in such a way as to indicate that their use is limited. Bonds of an issue for which a sinking fund is provided acquired for the sinking fund should be shown as an asset or as a deduction from the corresponding liability according to the terms of the indenture. Where it is required that the sinking fund be controlled by trustees such bonds should be treated as an asset and the corresponding par value as an outstnainding liability until released by the trustees.

TREASURY STOCK AND BONDS.—Treasury stocks and bonds, except when held under certain restrictions in a sinking fund, should not ordinarily appear among the assets but should be deducted from the corresponding capital or liability items. In the case of bonds and stocks with **par value** the deduction should be made at par. There is not yet a generally accepted method of treatment of treasury stock of no par value.

DEPRECIATION, DEPLETION, OBSOLESCENCE, AMORTIZATION, ETC.—Fixed or permanent assets used in the business are ordinarily valued for balance sheet purposes at cost or value at time of acquisition, reduced by depreciation to cover the expired portion of the life of the asset or depletion to cover the reduction in quantity. Buildings, machinery, etc., are written down on the basis of the estimated useful life of each item or group of similar items. **Improvements to leased property** which become useless or become the property of the lessor at the end of the term of the lease are written off over the term of the lease. **Leaseholds, patents and other assets** which have a definite life are written down on the basis of actual or effective life. The underlying principle is that an amount invested in such assets constitutes an expense which is prepaid over the period of the assets' use and which should be written off over that period.

Mines, timber lands, etc., are written down on the basis of actual **depletion** due to extraction, consumption, conversion. etc.

The usual method of computing the **annual allowance for depreciation** is to divide the cost less the estimated residual value by the known or estimated number of years of useful life of the asset. There are various refinements of this method but all are intended to accomplish the same result, namely, to write off the asset over the period of its useful life and to charge to each year's operations the portion of the total cost applicable to the year. Modifications of the simple method of writing off depreciation are: (1) the annuity method, which takes into account the element of interest; (2) the method which takes repairs into account with the object of apportioning to each year the same amount in total of repairs and depreciation; (3) the method which is based on quantity of output or actual time in operation.

Fixed assets which have been permanently discarded because of **obsolescence** or other causes and assets the use of which has been radically changed for their remaining life should be written down below cost less ordinary depreciation or depletion if necessary to reflect the remaining value of the assets in the business. Examples of assets which might be subject to such a write down are munitions machinery which was discarded at the end of the war or the buildings of a munitions plant which were of use only for storage purposes after the war ceased, patterns for types of product which are no longer in demand, copyrights for publications which will not be printed again, etc.

Amortization is a term which was not commonly applied to the writing off of such assets as buildings and machinery until the war. When applied to such assets it refers to abnormal write-offs due to abnormal costs, abnormal conditions with respect to the period of use of the assets, etc.

The primary purpose of writing off depreciation is not to reflect the actual value of the asset from year to year but simply to apportion the cost of the asset, which is really of the nature of a prepaid expense, over the years which receive the benefits and to preserve the captial investment unimpaired. The principle on which depletion is based is similar. The writing off of extraordinary obsolescence and amortization, however, is based on the actual reduced values at the time the abnormal reductions in values become certain.

Many **public utilities** have in recent years adopted a method of writing off plant through a **reserve for retirements.** This method, which is intended to take the place of depreciation, has not yet been generally accepted.

APPRECIATION.—Appreciation in the value of assets should be reflected in a balance sheet only under unusual circumstances, and when included, the fact should be clearly indicated and the corresponding amount should be shown as a separate surplus item. Where, for instance, the appreciation in value is of such a nature that it is taken into account by a bona fide investor in measuring the value of an asset as security on an obligation, it may be reflected on the balance sheet.

Appreciation is probably more often of significance with respect to **land** than it is with respect to any other asset. Where the appreciation has been conclusively demonstrated by the discovery of oil, valuable minerals, etc., it is proper to show it. It is also proper to show appreciation in the **value of patents** and other similar assets provided the value has been conclusively demonstrated.

When depreciation, depletion, etc., are computed upon the basis of appreciated values reflected on the books, an amount equivalent to that portion which is applicable to the appreciation should be transferred from the surplus amount arising from appreciation to the credit of earned surplus.

LAND, BUILDINGS, MACHINERY, ETC.—Fixed assets which are not used in the regular operations of the business but which are held for some other purpose should ordinarily be shown separately on the balance sheet. Fixed assets which are used in the business should ordinarily be valued at cost less allowances for depreciation, depletion, obsolescence, amortization, etc.

Land is usually carried at cost without any allowance for decline in value, but land purchased under abnormal circumstances such as for munitions manufacture during the war or land the value of which is affected by other extraordinary conditions should be valued at its appraised value. **Buildings,** etc., in process of construction should be shown separately and the fact that the asset is not ready for use should be indicated by its description. It is usually more practicable to inventory **small tools** and other similar items each year than to account for them through the ordinary plant accounts. In valuing such tools adequate allowances for depreciation, obsolescence, etc., should be made.

LEASEHOLDS, PATENTS, AND OTHER ASSETS WHICH HAVE A DEFINITE LIFE.—An asset such as a leasehold or a patent which has a definite life should be shown on the balance sheet at cost of acquisition less the pro rata deduction applicable to the expired portion of the asset's life. Although some value may attach to a patented article after the patent has expired, it is generally conceded that it is well to write off the entire cost of a patent during its legal life. If the commercial value of a patent or other similar asset expires before its termination a corresponding allowance should be made in writing off the asset. This is particularly applicable to copyrights.

In the United States patents run for 17 years and are renewable only by special act of Congress; trademarks have a life of 20 years, and are renewable

for an equal period; and **copyrights** have a life of 28 years and are renewable for an equal period.

GOODWILL AND OTHER ASSETS WITH UNLIMITED LIFE.—Ordinarily it is not necessary for balance sheet purposes to depreciate the cost of goodwill, secret formulas and other assets whose life is unlimited. The practice of treating advertising and other similar expenses as a fixed rather than a deferred asset, on the theory that such expenses represent a cost of goodwill, is not considered sound unless the expenditures are designed to increase the concern's goodwill permanently and unquestionably accomplish the intended result. Even then some part should be charged off against the periods which are specifically benefited by the expenditures.

ORGANIZATION EXPENSES.—Bona fide organization expenses may properly be carried as an asset on a balance sheet. Such expenses are carried as an asset throughout the life of the concern or charged off after sufficient profits have accumulated. The **best practice** is to charge off such expenditures within a relatively short period.

DISCOUNT ON CAPITAL STOCK AND BONDS.—Where capital stock is issued for less than its par value under the laws of a state which permits such issuance, the discount should be shown on the asset side of the balance sheet. If capital stock has been issued partly at a **premium** and partly at a discount the net amount should be shown as an asset or as capital surplus as the case may be. Discount on bonds issued should be shown as an asset and should be amortized over the life of the bonds. **Premium on bonds** issued should be shown as a liability and should be amortized over the life of the bonds.

EXPERIMENTAL EXPENSES, DEVELOPMENT EXPENSES, ETC.—Experimental expenses, development expenses and similar items are sometimes carried on a balance sheet as assets. Such items should be shown as **deferred charges** and be charged off during the periods benefited, should be described clearly to show their nature and should not be carried as assets after they cease to represent benefits which the concern may enjoy in the future.

RETURNABLE CONTAINERS.—Concerns which ship their product in returnable containers often charge their customers for the containers when shipped and credit the customers when the containers are returned. In such cases the cost of all containers less depreciation, or the inventory value of all containers, on hand and in the hands of customers, should be included among the assets on the balance sheet, and the full amount of the liability to pay for containers when returned should be included among the liabilities.

HYPOTHECATION OF ASSETS.—Any hypothecation of assets should be noted in the balance sheet.

Liabilities

STATING LIABILITIES IN THE BALANCE SHEET.—Where goods have been accepted but not paid for, the amounts payable have fully accrued and should be shown as liabilities on the balance sheet. Where purchase contracts have been signed but no goods have been delivered, there is only a contingent liability, which ordinarily need not be shown. Some financial managers omit from inventories and liabilities all reference to certain goods received before the date of a balance sheet and justify the practice by claiming that the items exactly balance each other. As a matter of fact the items do not balance each other except in the unimportant detail of the amount. They usually adversely

affect a balance sheet, since the liabilities are "quicker" than the assets. The honest executive will have the courage to present his actual condition.

As a general rule where value has been received or circumstances have given rise to liabilities prior to the date of the balance sheet, the liabilities should be shown in the balance sheet. Where value commensurate with the liability will not be received until after the date of the balance sheet, the liability need not be shown in the balance sheet unless title has passed to the purchaser, as in the case of goods shipped but not received. Important **contingent liabilities** or important happenings with respect to liabilities subsequent to the date of the balance sheet should be disclosed in a note on the face of the balance sheet.

If a liability is **payable in goods, foreign money or other property** the value of which fluctuates, it should be shown at the cost of liquidation on the date of the balance sheet.

CURRENT LIABILITIES.—Liabilities payable within a year from the date of the balance sheet should ordinarily be treated as current, but there is no definite rule as to the differentiation between current and fixed or long-term liabilities. Current liabilities are usually classified as accounts, vouchers or invoices payable, notes payable, acceptances payable, accrued pay rolls, interest, rent, taxes, etc. The order of arrangement is not usually important. Reference to the security should be made in the case of secured accounts. **Notes receivable discounted** may be shown among the liabilities and the corresponding amount among the assets to indicate the contingent liability.

ADVANCES, UNEARNED INCOME, ETC.—Advances received for values to be given or services to be rendered in the future should be shown as liabilities until the values are given or the services are rendered. Advances for interest, rent and other items which are charged for on the basis of time are written off, if the accrual method of accounting is followed, on the time basis. Such prepayments are often described as unearned interest, unearned rent, etc.

DIVIDENDS PAYABLE.—Dividends declared and unpaid at the date of the balance sheet should be shown as liabilities. **Cumulative dividends in arrears** do not constitute a liability until declared and should not be shown as such on the balance sheet. Where cumulative dividends are in arrears, the fact is often stated in a note on the balance sheet. Whether the fact should be stated on the balance sheet or not depends upon the purpose for which the balance sheet is prepared.

LONG-TERM LIABILITIES.—Different classes of long-term liabilities should be shown separately. **Mortgages** which are an obligation of the concern should be shown as liabilities and not as deductions from the assets mortgaged. But where a concern owns only the equity in property which is subject to a mortgage obligation of another party, the mortgage may be shown as a deduction from the asset. The balance sheet of a holding company should show the mortgage indebtedness of controlled or affiliated companies, whether or not a consolidated balance sheet is prepared. It must be assumed that balance sheets will be read and acted upon by others than those who know the facts. It is not helpful in the long run for a financial manager to publish a statement which in any degree fails to disclose all liabilities, including those which are not directly assumed.

In the description of long-term liabilities the interest rates and the due dates are usually shown in addition to the kind of obligation.

RESERVES.—There are **three main classes** of reserves which are common in balance sheets: (1) valuation reserves, (2) reserves to cover liabilities, and (3) reserves representing appropriations of surplus.

Reserves for valuation purposes are used where values are more or less doubtful, as in the case of doubtful receivables, or where it is desirable to indicate the original book value of an asset and the amount written off in addition to the net amount at which the asset is being carried, as in the case of plant which is being depreciated or mines which are being depleted. Such reserves should be deducted from the assets to which they apply and should not be shown on the liability side of the balance sheet. Although, broadly speaking, reserves for depreciation or depletion are valuation reserves, such reserves are not intended to adjust original book values of assets to actual values at the date of the balance sheet but merely to reflect the amounts written off on the basis of expired life or consumption up to the date of the balance sheet.

Reserves to cover liabilities are used when the amount of the liability is uncertain, when there is uncertainty as to whether or not there is a liability or when the liability is contingent upon future happenings. For example, the balance sheet at June 30 of a corporation which operates on a calendar year basis should contain among the liabilities a reserve for federal income taxes based on the income for the 6 months ended June 30 even though the liability of the corporation will be finally determined upon the results of the entire year. Or where a concern is threatened with an additional assessment of taxes, the amount of the liability may be uncertain or there may be uncertainty as to whether there is any liability, and it becomes necessary to reflect the estimated liability in a reserve. Reserves are also set up to cover obligations to perform a service or pay money in the future which arise from values or benefits received in the past. Reserves to cover liabilities should be included with current liabilities if the amounts will probably fall due within a year.

Reserves required under the terms of bond or capital stock issues do not usually represent obligations to pay anything (the obligations being already expressed on the balance sheet in the amounts of bonds or capital stock outstanding) but **restrictions on the distribution of surplus** made for the purpose of insuring the payment of sums on the bonds or capital stock when they fall due. Such reserves are a **part of capital** and should be shown, as separate items, in the group of capital items. Portions of surplus set aside by directors or stockholders in connection with such matters as (1) additions to plant, (2) replacement of assets not covered by insurance, in case of loss, etc., are also capital items and should be shown on the balance sheet as such.

Amounts set aside out of surplus for additions to or replacements of plant should not be confused with reserves for depreciation. In the first case there is merely a voluntary segregation of surplus to prevent the distribution of dividends out of funds required for the purposes mentioned, whereas in the second case there is an actual charge to expense to cover the expired portion of the life of the asset. The reserves of the first class may be credited back to free surplus after the need for them has ceased to exist, but reserves for depreciation, if properly computed, are mere segregated deductions from the asset accounts. When **appreciation** in the value of fixed assets is shown on the balance sheet, the offsetting amount of surplus thereby created may be shown as a reserve.

Capital

CAPITAL.—The term "capital" as used in the balance sheet should refer to the **excess of assets over liabilities,** or the **net worth** of the concern. It should include all **undivided profits,** whether set aside in reserves or unrestricted, as well as original investments, but should include no liabilities, nor reserves which

are the equivalent of liabilities. When there is doubt as to whether the relationship involved is that of creditor or that of proprietor the facts should be indicated as fully as space will permit. Capital should be plainly differentiated from liabilities.

In a detailed balance sheet the different items of capital should be shown separately. Capital or surplus at the beginning of the year, earnings for the year, withdrawals during the year and capital or surplus at the end of the year are often shown. The financial manager who follows this practice receives favorable comment from those whose duty it is to analyze balance sheets, and such comment may be of great value when times are bad.

The usual practice in the case of a sole proprietorship is to show only the total capital or to show the balance at the beginning of the fiscal period, the earnings and withdrawals during the period and the balance at the end of the period. Partnership capital is usually shown in the same way, either in total or by partners.

CAPITAL STOCK.—**Different classes** of outstanding capital stock should be shown separately. **Fully paid capital stock** with par value should be shown at its par value. Capital stock **without par value** should be shown at the value of the assets paid in for it at the time paid in or at its stated value when issued. Capital stock which has **not** been **fully paid** should be shown at the amount paid in with a note indicating the par value.

Usually the differences between various classes of stock cannot be brought out in detail by the necessarily brief balance sheet descriptions but, so far as practicable, the descriptions should indicate (1) the kind of stock, (2) if **preferred as to dividends,** the rate of dividend and whether **cumulative or non-cumulative,** and (3) if **redeemable** above par the redemption price.

For handling of subscriptions to capital stock see page 206.

SURPLUS.—Surplus is the excess of assets over the sum of liabilities and capital stock. In a detailed balance sheet capital, **paid-in or donated surplus** and earned surplus should be shown separately. **Earned surplus** should include only amounts earned in the operation of the business less losses and earnings distributed. There is no real distinction between capital surplus and paid-in surplus. **Capital surplus** should include premiums on sales of capital stock, capital donated or paid in, and any other capital gains arising in connection with the issuance or reacquirement of capital stock. Any premiums paid for the reacquirement of capital stock should be applied to reduce capital surplus or earned surplus if there is no capital surplus.

It is sometimes advisable to treat **extraordinary gains** from the sale or conversion of capital assets as special surplus. When surplus is set up through the **revaluation of assets** which have appreciated in value the amount should be shown separately and its origin should be indicated. Any part of surplus which is restricted should be so designated. A common example is surplus reserved for a sinking fund under the requirements of a bond issue. Any part of surplus set aside merely by action of the board of directors may or may not be shown separately, depending upon the purposes for which set aside and the purpose for which the balance sheet is prepared. **Undivided profits** is a term which is used loosely. It may refer to the entire earned surplus or it may refer only to some part of it.

A summary of changes in surplus during the fiscal period should be given in the balance sheet, at the end of the profit and loss statement or in a separate statement accompanying the balance sheet and the profit and loss statement. This reasonable requirement is often omitted. When the closing surplus of

one balance sheet plus profits and minus dividends and losses for the year does not reconcile with the surplus at the end of the year, great annoyance is caused to those who analyze balance sheets. The wise financial manager will anticipate the absent treatment which his balance sheet will receive and will furnish the necessary reconciliation.

SURPLUS—NO-PAR VALUE STOCK.—In case of no-par value stock it is important that capital surplus and earned surplus be separated. Many balance sheets are not understandable because capital and earned surplus are not separated. In order to show the true status of affairs it is necessary to segregate capital stock, capital surplus, and earned surplus. Usually the state laws require that **a minimum value** be ascribed to no-par value shares, irrespective of the number issued. Bearing this in mind the arrangement of these items in the balance sheet should be essentially as is shown below:

Stock of No-Par Value:
..... shares authorized at $.... per share.
..... shares issued.

Capital Surplus
This item should represent the excess of assets over liabilities at the formation of the company, minus the amount ascribed to capital stock and plus or minus capital gains or losses. Changes in capital surplus occurring after incorporation should be shown on the balance sheet.

Earned Surplus
This should show the net result of operations after incorporation.

DEFICIT.—A deficit, as the term is used on balance sheets, is the excess of the sum of liabilities and capital stock over assets. If a deficit is shown on the asset side of the balance sheet it should be plainly set out from actual assets. It is better practice to show a deficit as **a deduction from capital stock,** as:

Capital Stock	$100,000	
Less Deficit	25,000	$75,000

Other Balance Sheet Considerations

CONTINGENT ASSETS AND LIABILITIES.—Ordinary contingencies, such as the customary **purchase and sales contracts** at favorable prices, are not usually mentioned on a balance sheet. But where contingencies have an important bearing on the financial condition they should be indicated by footnotes. The contingent liability on discounted paper is often reflected in the balance sheet by showing the amount both as an asset and as a liability.

COMMITMENTS.—It is not general practice to show in balance sheets future commitments—sales or purchases; until it becomes fairly general it cannot be considered good accounting practice to insist upon it, but whenever the information is essential to a true statement of financial position, it must be done. The information conveyed is of great interest and, unless publication discloses trade secrets, the practice started to some extent as of December 31, 1920, should be encouraged. When it is deemed proper to disclose the information, the following forms are suggested:

The company's contracts for purchase of material and for construction outstanding on (date of balance sheet) aggregated $..... payable during (period of time).

The company's contracts for purchase of materials to be delivered during (period of time) outstanding at (date of balance sheet) aggregated $..... or $..... more than the market value of the materials at (even date or more recent date).

On the basis of market values at (date of balance sheet or more recent date) the purchase contracts unfulfilled at (date of balance sheet) aggregating $..... would show a contingent loss of approximately $.....

The company's contracts for purchase of materials to be delivered during (period of time) outstanding at (date of balance sheet) aggregated $..... or $..... more than the market value of the materials at (even date or more recent date), but $..... is covered by sale contracts, leaving $..... as the net amount of possible loss.

The unfulfilled purchase contracts aggregate $..... at (date of balance sheet), and after applying thereto the unfulfilled sale contracts in excess of the inventory at (date of balance sheet) would show, on the basis of market values at (date of balance sheet or more recent date), a contingent loss of approximately $.....

Whenever such information is of known value to competitors it may be wise to omit it. But most statements regarding the undue advantage which concerns get out of the published reports of their competitors are inaccurate. The benefits arising out of the favorable comments always accorded to full disclosure of possible unfavorable conditions usually outweigh any detrimental effect. When the financial manager is in doubt he should resolve the doubt in favor of publication and against suppression.

BALANCE SHEETS GIVING EFFECT TO SUBSEQUENT HAPPENINGS.—Balance sheets are sometimes required to show the financial condition of a concern at a given date modified by certain important subsequent happenings, such as **new issues of stocks, bonds, etc.** An example follows:

S. S. JONES CORPORATION

BALANCE SHEET

As at December 31, 1924

Modified to give effect to the following transactions yet to be consummated:
(1) Issuance of $100,000 7% cumulative preferred stock for cash
(2) Payment of $50,000 short term notes payable

Assets		Liabilities	
Current:		Current:	
Cash	$ 60,000.00	Notes Payable	$ 30,000.00
Accounts Receivable	40,000.00	Accounts Payable	25,000.00
Inventory	120,000.00	Federal Income Tax	25,000.00
Total Current Assets	220,000.00	Total Liabilities	80,000.00
		Capital	
Plant (less Reserve for Depreciation)	200,000.00	Preferred Stock (7% Cumulative)	100,000.00
Patents	80,000.00	Common Stock	200,000.00
		Surplus	120,000.00
	$500,000.00		$500,000.00

The Special Committee on Co-operation with Bankers of the American Institute of Accountants on September 10, 1923, submitted the following **recommendations in regard to the certification** of such statements:

"I. The accountant may certify a statement of a company giving effect as at the date thereof to transactions entered into subsequently only under the following conditions, viz.:

(a) If the subsequent transactions are the subject of a definite (preferably written) contract or agreement between the company and bankers

(or parties) who the accountant is satisfied are responsible and able to carry out their engagement;

(b) If the interval between the date of the statement and the date of the subsequent transactions is reasonably short—not to exceed, say, 4 months;

(c) If the accountant, after due inquiry, or, preferably after actual investigation, has no reason to suppose that other transactions or developments have in the interval materially affected adversely the position of the company; and

(d) If the character of the transaction to which effect is given is clearly disclosed, i.e., either at the heading of the statement or somewhere in the statement there shall be stated clearly the purpose for which the statement is issued.

"II. The accountant should not certify a statement giving effect to transactions contemplated but not actually entered into at the date of the certificate, with the sole exception that he may give effect to the proposed application of the proceeds of new financing where the application is clearly disclosed on the face of the statement or in the certificate and the accountant is satisfied that the funds can and will be applied in the manner indicated. It is not necessary that the precise liability shown in the balance sheet before adjustment should actually be paid out of the new money. It is sufficient, for instance, where the balance sheet before the financing shows bank loans, if the proceeds are to be applied to bank loans which are either identical with or have replaced the bank loans actually outstanding at the date of the balance sheet. Ordinarily, however, the accountant should not apply the proceeds of financing to the payment of current trade accounts payable, at least not against a normal volume of such current accounts payable, because there must always be such accounts outstanding and the application of new moneys against the outstandings at the date of the balance sheet results in showing a position which in fact could never be attained. The accountant may usually best satisfy himself that the funds will be applied as indicated by getting an assurance from the issuing house on the point.

"III. In any description of a statement or in any certificate relating thereto it is desirable that the past tense should be used. It should also be made clear that the transactions embodied have been definitely covered by contracts.

"IV. When the accountant feels that he cannot certify to such a hypothetical statement, probably because of the length of the period which has elapsed since the accounts have been audited, he may be prepared to write a letter, not a certificate form, stating that at the request of the addressee a statement has been examined or prepared in which effect is given, in his opinion correctly, to proposed transactions (which must be clearly specified). Such letters should be given only in very special cases and with the greatest care."

The committee illustrates the special form of statement and certificate, and also of the letter coming within the terms of Rule IV, as follows:

"Form of balance sheet and certificate where conditions laid down in rules I and II have been meet.

A. B. C. COMPANY

BALANCE SHEET

DECEMBER 31, 1922

(Giving effect as at that date to the sale of $5,000,000 first mortgage bonds since consummated and the application of the proceeds in part in reduction of liabilities.)

(ASSETS)

(LIABILITIES)

We have examined the books and accounts of the A. B. C. Company for the year ended December 31, 1922, and the agreement dated March 2, 1923, for the sale of $5,000,000 first mortgage bonds, and we certify that the above balance sheet is, in our opinion, a fair and accurate statement as of December 31, 1922, of the financial position of the company, giving effect at that date to the provisions of the agreement mentioned.

New York
March 2, 1923 .....

The letter coming within terms of Rule IV:

New York, August 25, 1923.

Mr. John Smith, Vice-president,
A. B. C. Company,
52 William Street,
New York.

Dear Sir: In accordance with your request, we have examined the attached balance sheet of the A. B. C. Company as of June 30, 1923, and beg to advise you that in our opinion it is prepared so as to reflect correctly the position of the company as shown by the books, but giving effect as at that date to the pending issue of $300,000 first mortgage bonds as provided in the agreement dated August 25, 1923, and to the extinguishment out of the proceeds of the new financing of the notes payable to bankers to the amount of $300,000.

It will be understood that we have not audited the books since the close of the fiscal year on December 31, 1922. You have heretofore been furnished with the audited accounts as of that date, which were in accord with the books.

Yours very truly,

.....

Comparative Balance Sheet

A comparative balance sheet shows the assets, liabilities and net worth as at two or more dates so that changes which have taken place may be seen readily. It is usually desirable to set up a comparative balance sheet in less detail than a detailed balance sheet for the sake of easy reading. An example follows:

ASSETS	Dec. 31, 1925	Dec. 31, 1924	Increase Decrease
Current:			
Cash	$10,000	$ 5,000	$5,000
Accounts Receivable	15,000	17,000	2,000
Inventory	13,000	12,000	1,000
Total Current Assets	38,000	34,000	4,000
Plant (less Reserves for Depreciation)	30,000	28,000	2,000
Patents	1,000	2,000	1,000
	$69,000	$64,000	$5,000
LIABILITIES			
Current:			
Notes Payable	5,000		5,000
Accounts Payable	2,000	1,000	1,000
Total Current Liabilities	7,000	1,000	6,000
CAPITAL			
Capital Stock	40,000	40,000	
Surplus	22,000	23,000	1,000
	$69,000	$64,000	$5,000

The column showing increases or decreases is often omitted, and sometimes the column containing figures for the earlier date is omitted and only the column showing increases and decreases is given in addition to the column containing current figures.

Income or Profit and Loss Statement

The income, or profit and loss statement, shows in more or less detail, according to the purposes for which the statement is prepared, the gross income, cost, expenses, and net results of doing business during a given period.

LACK OF UNIFORMITY OF TERMINOLOGY.—Inspection of annual reports issued during 1921 by many well known corporations, containing balance sheets and income statements prepared and certified by equally well known public accountants, proves beyond a doubt that there is **a great lack of uniformity in terminology** regarding the items of income and expenses. At one time it seemed the trend of good accounting practice was towards the term "profit and loss account"; but at the present time the use of other terms is as frequent, showing that there was no trend in any direction. The terms **"profits," "income," "revenue,"** and **"earnings"** are used synonymously at times and at other times a distinction is drawn; but there is no uniformity in the distinction, so that it increases the confusion to differentiate. One result of the lack of uniformity in accounting terminology is the difficulty, and in some cases the impossibility, of comparing the results of one concern with those of another.

It is suggested that the term **"income statement"** be adopted. Many of our leading corporations use it and it has much to recommend it.

FORM OF INCOME ACCOUNT.—It is generally accepted practice to prepare income accounts in what may be called **narrative form** as distinguished from **the account form.** In the former case the gross sales or earnings are stated, deductions are made, and extraordinary items of income are added. Thus those interested are enabled to read the statement as a continuous story of what has been done. The story is unfolded so that no effort is required and no calculation need be made to comprehend each step and the final result. It is advisable to adopt uniform methods whenever feasible, particularly when comparisons with other periods and other businesses are to be made, but form must be subordinated to intelligent use and usability. It is wise to depart from prescribed forms when the story can be told better by the use of differently arranged forms.

The **account form** contains sales or gross earnings on the credit side of the account, and costs, expenses, losses, etc., on the debit side; the balance is brought down as net income or deficit. The account form does not lend itself to continuous reading and has little if anything to recommend it.

FORM SUGGESTED BY FEDERAL RESERVE BOARD.—A form of income statement suggested by the Federal Reserve Board in 1917 is shown in Fig. 11. Note that each class of expense is to be "itemized to correspond with ledger accounts kept." If there were many of these items it would be better to show them in separate schedules. It would also be better in many cases to show the details of cost of sales in a separate schedule instead of in the profit and loss statement. This is particularly true where manufacturing expenses as well as purchases are a part of the total cost. Where all the items of cost and expense can be arranged on one sheet conveniently, supplementary schedules should not be used. In many cases there are more items of "other income" and "deductions from income" than those shown on the form.

Since 1917, when the Federal Reserve Board form was published, the **federal income tax** has become of sufficient importance to be shown as a separate item. A common practice is to deduct the tax from "net income before deducting federal income tax," and show the remainder as "net income after deducting federal income tax."

The term "net income—profit and loss" is not well considered. A better term would be "net income before special credits and charges." Important

COMPARATIVE STATEMENT OF PROFIT AND LOSS

FOR THREE YEARS ENDING.....19

	Year ending—		
	19—	19—	19—
Gross sales	$.....	$.....	$.....
Less outward freight, allowances, and returns			
Net sales			
Inventory beginning of year			
Purchases, net			
Less inventory end of year			
Cost of sales			
Gross profit on sales			
Selling expenses (itemized to correspond with ledger accounts kept)			
Total selling expense			
General expenses (itemized to correspond with ledger accounts kept)			
Total general expense			
Administrative expenses (itemized to correspond with ledger accounts kept)			
Total administrative expense			
Total expenses			
Net profit on sales			
Other income:			
Income from investments			
Interest on notes receivable, etc.			
Gross income			
Deductions from income:			
Interest on bonded debt			
Interest on notes payable			
Total deductions			
Net income—profit and loss			
Add special credits to profit and loss			
Deduct special charges to profit and loss			
Profit and loss for period			
Surplus beginning of period			
Dividends paid			
Surplus ending of period			

FIG. 11. Income Statement Form Recommended by Federal Reserve Board

special credits and special charges to profit and loss should be described in the income statement if possible. The **analysis of surplus** for the period is placed where it should be, viz., at the end of the statement.

FORMS PREPARED BY BANKS.—Several forms prepared by banks for use in granting credit are shown on pages 183 and 185. These are in account form so that they may be conveniently placed on the same general report with the balance sheet and the analysis of surplus.

INCOME FROM ORDINARY OPERATIONS.—The only earnings which should be shown in the first division of the income account are those which are incident to the normal operation of the business. All other earnings should be excluded from this division.

GROSS INCOME.—It is customary and desirable to show the gross business transacted, whether arising from sales of goods, or from services rendered by professional men and others, or by public service corporations or similar enterprises.

RETURNS.—Where earnings arise from the delivery of goods and for any reason the goods are returned, the aggregate returned is usually **deducted** before stating **the gross income.** The reason for this is that, if the goods are returned and credited at the same price at which charged, and are available for resale, it is improper to augment the sales by transactions never consummated, thus rendering the calculations of gross profits, etc., less valuable. This is the general rule, but if it is desired to have the returned sales shown as a deduction from the gross sales, there is no objection to such procedure. It may be of interest as a means of showing whether or not the proportion of returns to the total volume of business is proper.

ALLOWANCES.—It is not always easy to determine the distinction between allowances which represent true deductions from gross sales and those which should be included among costs or expenses. In the retail automobile business it is customary to accept used cars in part payment for new cars. The used cars usually realize less than their nominal cost. On the face of the transaction the dealer sells a new car for $3,000, allows $1,000 on a used car, and collects $2,000 in cash. He sells the used car for $800. Under good accounting practice, the apparent loss of $200 (plus expenses of resale) should be shown as a deduction from the gross sales price of the new car, rather than as a loss arising from the sale of a used car.

DISCOUNTS ON SALES.—When the rate of discount for prepayment is 2% flat or less, it is proper to consider it a **true cash discount.** When the rate of discount is more than 2%, it is not logical to look upon it as a **premium for prepayment.** Many so-called cash discounts are 7% flat. When such a rate is used it is not logical to deal with it in any other way than as a deduction from sales. The concern making such sales should deduct the discounts (in an aggregate sum if more convenient) from the outstanding accounts and the purchasers should deduct the discounts from their cost prices and from their inventories. The rule is a somewhat rough and ready one but it is accurate enough. It is not inflexible but should be followed unless a better general rule can be devised. In defining "cost" and "net sales" there must be some uniformity even though precise formulas are not always possible.

The aggregate of cash discounts should be entered among the expenses of the business and not as a direct deduction from gross earnings. The theory is that the discount allowed is a premium given to secure prompt payment as well as for the use of the money at an earlier date than it would be received if

no inducement were offered. If these allowances are strictly cash discounts, and are granted only if the debtor pays within the time specified, they are clearly an expense and should not be charged against sales as if in the nature of an abatement of the purchase price of the goods.

COST OF SALES.—The amount of detail of the cost of a manufacturing business that may be presented in a statement is limited only by the classification of accounts or by the analysis that may be made of them. Following, given in Bell's "Accountant's Reports," is a fairly complete statement of the cost of manufactured goods sold:

Cost of Manufacture:

- Materials consumed
- Direct labor
- Factory expenses:
  - Superintendent and foremen
  - Factory office salaries and supplies
  - Receiving department expenses
  - Cartage inward—estimated
  - Storage department expenses
  - Stock department expenses
  - Janitors, watchmen and elevatormen
  - Power, heat and light:
    - Fuel
    - Wages
    - Oil, waste, etc.
    - Current purchased
  - Repairs:
    - Building
    - Machinery and equipment
  - Depreciation:
    - Building
    - Machinery and equipment
  - Property taxes
  - Insurance—fire, liability, etc.
  - Rent of factory building
  - Unemployed time
  - Inspection
  - Defective goods
  - Experimental expenses
  - Infirmary
  - Miscellaneous
    - Total factory expenses
- Total materials, direct labor and factory expenses
- Less:
  - Sales of scrap
  - Increase in inventory of work in process
    - Total
      - Total cost of manufacture

Add Decrease in Inventory of Finished Goods

Manufacturing Cost of Goods Sold

Packing and Shipping Expenses:

Salaries and wages
Materials
Cartage outward—estimated
Total

Cost of Goods Sold

In the foregoing it is assumed that **inward freight, duty, marine insurance, and other direct costs** have been applied to the material and supply accounts affected, but that the company does its own carting and no distribution of the cost is made except a more or less arbitrary division between inward and outward.

The statement is also based upon the assumption that the finished goods are not packed until they are shipped. If, as often happens, the goods are carried in stock in the containers in which they are shipped, or they are not carried in stock at all, but are shipped as soon as manufactured, the major part of **packing and shipping expenses** should be classified as Factory Expenses, and thus be reflected in the Cost of Manufacture, which should be the basis for valuation of the inventory of finished goods. In such cases the remainder, representing shipping expenses, is relatively so inconsequential that it is treated in the same way.

According to Bell, the **cost of materials** consumed may be shown in greater detail if desired—as to kinds of material and as to purchases (net) and inventories at the beginning and end of the period. It is not considered necessary to show returned purchases as a separate item in any event. The differences in inventories of work in process and finished goods may also be detailed by showing in each case the inventories at the beginning and end. Most business men prefer the condensed form; if they want to know the amounts of the inventories they look at the balance sheet.

It is comparatively seldom that the degree of detail shown above would be given in a statement of income and profit and loss. For the presentation of such elaborate details, whether of cost or expenses, schedules are usually employed, only the totals being shown in the exhibits. In some cases excise or revenue taxes are properly treated as cost of manufacture.

SHIPPING EXPENSES.—Packing and shipping expenses should be shown (1) as a part of cost of sales, (2) as a part of selling and shipping expenses, or (3) as a separate item, according to circumstances.

SELLING EXPENSES.—As given by Bell, the items comprised in this group are usually somewhat as follows:

Salaries of sales manager and clerks
Salaries of salesmen
Commissions
Traveling
Advertising
Catalogues, etc.
Rent of sales offices
Postage, stationery, etc.
Telephone and telegraph
Sundry sales office expenses
Miscellaneous

GENERAL EXPENSES.—This group is often called **Administrative and General Expenses.** It is intended to include expenses which apply to the business as a whole, and not exclusively to any one of its major operations. These expenses, as listed by Bell, are as follows:

Salaries of officers
Salaries of general office clerks
Rent of general office
Traveling
Corporation and capital stock taxes
Exchange (domestic) and collection charges

Postage, stationery and printing
Telephone and telegraph
Legal
Professional accounting
Directors' fees
Dues and subscriptions
Contributions and donations
Sundry office expenses
Miscellaneous

BAD DEBTS.—Ordinary losses from bad debts may be included under general expenses, but sometimes extraordinary losses of this nature should be shown as separate items or included under Other Charges.

OTHER INCOME CREDITS.—The items to be grouped under this caption should represent income from sources other than the regular operations of the business, including as such **extraneous income** derived from financial operations and considered applicable to the current period. Such items, in the case of a manufacturing or mercantile business, may, according to Bell, be as follows:

Cash discounts on purchases
Interest on bonds owned
Interest on notes and accounts receivable
Interest on bank balances
Dividends on stocks owned
Net income from real estate
Profit from sale of temporary investments
Profit from foreign exchange
Royalties received
Commissions received
Profit from sale of materials, etc.
Miscellaneous

OTHER CHARGES.—Interest charges and expenses and losses in transactions outside of the regular field of a business should be included under "Other Charges," or "Deductions from Income."

NET INCOME.—It is proper to show deductions from gross income, but there should be no deductions from net income except extraordinary items of substantial amounts which have no relation to the current period; every effort should be made to avoid this class of deductions. The amount of net income should be transferred to surplus. No charges should appear in surplus except charges for dividends and deficits, and no credits except credits for net income.

The **courts** in various jurisdictions have defined "income," "net income," and "net profits" available for dividends, in so many ways that a corporate officer who desires authority for any position which he wishes to assume can usually find it in the law reports.

If a public accountant were asked to define the term "net income," he would probably reply: "The net income of a business is the surplus remaining from the earnings after providing for all costs, expenses, and reserves for accrued or probable losses."

The expression, "balance available for depreciation, amortization, depletion, and taxes," is very bad practice. Bankers seem to think that interest can be met out of the general reserves mentioned above. For a limited period this is true, except as to taxes, but even then the postponement may be for a year only. Depreciation reserves may be available for several years. Depletion alone may be permanent. But it is not good practice in published statements to omit the amounts reserved in the books, or to indicate that such reserves may be used for the payment of interest. When a financial manager makes such a statement whether or not under pressure, he is merely laying up trouble for himself. In effect it is an overstatement of net income.

COMPLETED TRANSACTIONS.—Earnings which are represented by completed transactions with trade debtors must be clearly distinguished from those earnings which are represented by transactions only partially completed, the results of which are in doubt. Except in unusual cases, no profit should be

taken **unless a cause of action has arisen** which can be enforced against the debtor. In other words, if work in progress cannot be earmarked as being for a definite customer, or if it has not proceeded far enough to form the basis of an action, it must be taken into the inventory and valued as an inventory item and not as an account receivable. Ordinarily no profit or loss thereon should appear in the income account except when there is a definite change in values at the date of the balance sheet and accuracy demands a revision. If a revision is justified, the result thereof must appear as a separate item; it must not be merged with realized income. But if work is undertaken **"on order"** and is proceeding satisfactorily, and if it is apparent that the estimated profit thereon will be realized, more or less, then it is permissible to take credit for the proportion of profit earned to the date of the income account.

Under ordinary conditions **profits on undelivered sales** should not be anticipated. Most concerns which sell ahead have a fairly constant and uniform business so that no statistical problem arises when sales expenses are charged to one period while the following period reaps the benefit thereof. But a shipbuilder may have a dozen jobs under way at the end of one fiscal period, while he may have 6 or 18 jobs under way at the end of the next period. If he takes up the profit on completed jobs only, his books may show a state of affairs vastly different from the facts. His most prosperous year may easily show up as the worst. The same is true of contractors in the building and other trades.

The practice of having work done at a maximum profit or upon a fixed percentage has been extended to much work which formerly was undertaken for a round sum. In such a case the profit is determined by the amount of the work completed and may be taken into account in the same manner as with professional earnings.

INTERCOMPANY PROFITS.—Some large industrial enterprises control several or all of the processes of manufacture of one or more products. Frequently the various processes are performed by plants which are entirely distinct units operating under their own individual charters. As a consequence frequent sales and resales are made, with the result that profits are shown on intercompany sales and quantities of merchandise appear in the inventories at prices greater than actual cost. It is now generally recognized as good practice to eliminate all intercompany profits and the corresponding **excessive inventory valuations** from statements which purport to show the true financial status of the group of related companies. The United States Steel Corporation, for example, in its consolidated balance sheet, lists its inventories of products on hand which have been sold and transferred from one subsidiary company to another, at net value, i.e., substantially the cost of production to the companies which furnish the products.

PROFITS ON PRICE FLUCTUATIONS.—Many enterprises using staple raw materials frequently buy their requirements in advance, and in numerous instances have found it more profitable to sell their entire stock on a rapidly advancing market than to operate their mills. This occurs oftener with cotton than with any other commodity, but the practice obtains in other lines, such as grain, pork, copper, etc. If such profits are actually realized, they should appear as **a special item** in the current income account. If the transactions have resulted in a net loss, it also should appear as a special item in the current accounts, inasmuch as it must be paid out of current net income.

ITEMS APPLICABLE TO PRIOR PERIODS.—The items of expenses in an income account embrace those which have accrued during the period, whether paid for or not. At the closing date all accrued expenses, rents, taxes, interest,

and similar items should be ascertained and entered as liabilities on one side and charged to their respective expense accounts on the other.

Since many of these expenses are more or less unusual in their nature, it seems that some are unavoidably omitted. The question then arises in subsequent periods, whether or not the items applying to prior periods should be charged to surplus or be included among the current expenses of the period in which paid. There are two reasons in favor of the latter practice but no good reason in favor of the former. In the first place, when charges are made against an old book surplus it simply means that so far as published accounts go they are never in evidence. That is, the items are not known at the time and are therefore omitted from the accounts in the period to which they belonged, and, being eliminated from the period in which paid, they practically disappear.

The most valuable records compiled are **comparative schedules of earnings and expenses,** and when these are carried along from year to year it is practically impossible to adjust reports which are perhaps a year old and of which frequent use has been made. Therefore, proper practice permits the inclusion of such items in the current income account, without calling special attention to the matter, unless the items are large enough to alter materially the results, in which case the items are deducted from the net income of the current year before a transfer to surplus is made. If the items are comparatively small it may be assumed that corresponding items are omitted from the current accounts. These will have to be taken care of in the subsequent period.

This must not be construed as an excuse for closing accounts before every known liability is taken into consideration. The financial manager who does not satisfy himself that all known liabilities and those which should be known are included in a balance sheet, is guilty of negligence and deserves any ill consequence which may ensue.

COMPARISONS.—The financial manager should strive so to arrange the accounts as to show a comparison with previous periods; also, if the nature of the business permits, unit costs or earnings should be shown. For instance, the accounts of a taxicab company, if properly set up, show the average gross earnings of cabs per day. They also show the operating cost per mile. Perhaps the simplest illustration is a blast furnace. It is relatively easy to determine the cost of producing a ton of pig iron, but the figures are of little value unless the output is shown along with the average cost. The production for one week may be 10,000 tons at an average cost of $8 per ton; if the production the next week is 15,000 tons at a cost of $8 per ton, the natural inquiry is: Why not the cost proportionately less upon the greater output? If the cost per ton is reported separately from the production, attention may not be called to the possibility that lower costs are in order.

The **ratio of each class of expense** to the total volume of business is always interesting. In dull times certain so-called fixed charges may not be expected to vary, but there are other classes of expenses which should fluctuate ratably with the volume of business.

Consolidated Statements

Where a corporation controls another corporation or other corporations or where corporations are controlled by the same interests, if the businesses are conducted as a unit or a close relationship is maintained, consolidated statements are usually necessary to show the financial condition of the group.

CONSOLIDATED BALANCE SHEETS.—A consolidated balance sheet is made up of the totals of items in the individual balance sheets with **inter-**

company items eliminated. If the individual balance sheets are properly prepared the amount of the accounts receivable of one company should ordinarily be the same as the amount of the corresponding accounts payable of the other companies subject to **adjustment for items in transit,** and the elimination of these accounts should not, therefore, affect the combined amounts of net worth. But where capital stocks or bonds of one of the companies are owned by another of the companies there may be differences between the stocks or bonds as shown in the balance sheet of the company which owns them and the amounts of the corresponding liability or capital items in the balance sheet of the other company. In such a case the necessary adjustment of the differences must be made by increasing or reducing the sum of the surplus accounts of the companies or by setting up an asset, which is usually described as goodwill.

If X corporation acquires control of Y corporation through a purchase of the capital stock of Y and the amount paid for the stock is in excess of its book value, such excess is deemed to represent the value of **goodwill** and, in a consolidated balance sheet, is shown as goodwill. As in the case of the balance sheet of a single corporation, the amount of such goodwill need not be written down subsequently unless disposed of.

If X corporation acquires control of Y corporation through a purchase of the capital stock of Y at a price which is less than its book value the difference should be applied in a consolidated balance sheet (1) to reduce the value of any assets of Y which are believed to be overvalued, or (2) to create or increase **capital surplus.** Simple examples follow:

Capital Stock of Y Corporation Acquired by X Corporation for an Amount Exactly Equal to Book Value of Y's Assets

Assets	X Co.	Y Co.	Eliminations	Consolidated
Account receivable from Y Co	$10,000		$10,000	
Capital stock of Y Co	29,000		29,000	
Other assets	11,000	$40,000		$51,000
	$50,000	$40,000	$39,000	$51,000
Liabilities				
Account payable to X Co		10,000	10,000	
Other liabilities	15,000	1,000		16,000
Total liabilities	15,000	11,000	10,000	16,000
Capital				
Capital stock	30,000	1,000	1,000	30,000
Surplus	5,000	28,000	28,000	5,000
	$50,000	$40,000	$39,000	$51,000

Capital Stock of Y Corporation Acquired by X Corporation for an Amount in Excess of Book Value of Y's Assets

Assets	X Co.	Y Co.	Eliminations	Consolidated
Account receivable from Y Co	$10,000		$10,000	
Capital stock of Y Co	35,000		35,000	
Other assets	5,000	$40,000		$45,000
Goodwill			6,000	6,000
	$50,000	$40,000	$39,000	$51,000
Liabilities				
Account payable to X Co		10,000	10,000	
Other liabilities	15,000	1,000		16,000
Total liabilities	15,000	11,000	10,000	16,000

Capital				
Capital stock	30,000	1,000	1,000	30,000
Surplus	5,000	28,000	28,000	5,000
	$50,000	$40,000	$39,000	$51,000

Capital Stock of Y Corporation Acquired by X Corporation for an Amount Less than Book Value of Y's Assets

Assets	X Co.	Y Co.	Eliminations	Consolidated
Account receivable from Y Co	$10,000		$10,000	
Capital stock of Y Co	20,000		20,000	
Other assets	20,000	$35,000		$55,000
Goodwill		5,000	5,000	
	$50,000	$40,000	$35,000	$55,000
Liabilities				
Account payable to X Co		10,000	10,000	
Other liabilities	15,000	1,000		16,000
Total liabilities	15,000	11,000	10,000	16,000
Capital				
Capital stock	30,000	1,000	1,000	30,000
Capital surplus			4,000	4,000
Earned surplus	5,000	28,000	28,000	5,000
	$50,000	$40,000	$35,000	$55,000

In this last illustration corporation X pays nothing for the goodwill item that is carried by Y ($5,000). Therefore such value should be eliminated in the consolidated balance sheet. Corporation X also purchased the tangible net assets of corporation Y for $4,000 less than book value. It is possible that a revaluation of the tangible assets of corporation Y would result in a writing down of specific items to reflect the apparent overvaluation of $4,000, but unless and until such revaluation is made the tangible assets of corporation Y should be carried at book value, thus requiring the setting up of a capital surplus account in the consolidated balance sheet.

MINORITY INTEREST.—In a consolidated balance sheet capital which is held outside the controlling group should be shown separately at the book value of the assets which it represents. Different classes of capital stock held by minority interests and portions of surplus allotted thereto are shown separately or in one amount according to the purpose which the balance sheet serves.

90% of Capital Stock of Y Corporation acquired by X Corporation at a Price Exactly Equal to Book Value

Assets	X Co.	Y Co.	Eliminations	Consolidated
Account receivable from Y Co	$10,000		$10,000	
Capital stock of Y Co. (90% of total)	26,100		26,100	
Other assets	13,900	$40,000		$53,900
	$50,000	$40,000	$36,100	$53,900
Liabilities				
Account payable to X Co		10,000	10,000	
Other liabilities	15,000	1,000		16,000
Total liabilities	15,000	11,000	10,000	16,000
Capital				
Capital stock	30,000	1,000	1,000	30,000
Surplus	5,000	28,000	28,000	5,000
Minority interest in Y Co. (show number of shares)			2,900	2,900
	$50,000	$40,000	$36,100	$53,900

If less than 100% of the stock of Y corporation is acquired by X corporation and the amount paid is greater or less than the book value of the stock, the adjustment in a consolidated balance sheet to care for the difference should be for only the amount of the difference. A similar adjustment of values represented by the minority interest should not be made.

90% of Capital Stock of Y Corporation Acquired by X Corporation for an Amount in Excess of Book Value of Y's Assets

Assets	X Co.	Y Co.	Elimi-nations	Consoli-dated
Account receivable from Y Co	$10,000		$10,000	
Capital stock of Y Co. (90% of total)	31,500		31,500	
Other assets	8,500	$40,000		$48,500
Goodwill			5,400	5,400
	$50,000	$40,000	$36,100	$53,900
Liabilities				
Account payable to X Co		10,000	10,000	
Other liabilities	15,000	1,000		16,000
Total liabilities	15,000	11,000	10,000	16,000
Capital				
Capital stock	30,000	1,000	1,000	30,000
Surplus	5,000	28,000	28,000	5,000
Minority interest in Y Co. (show number of shares)			2,900	2,900
	$50,000	$40,000	$36,100	$53,900

INTERCOMPANY PROFITS.—On a strict basis intercompany profits included in assets of individual corporations should be eliminated in a consolidated statement but in practice this elimination is not usually made unless the amounts involved are comparatively large.

BONDS OF SUBSIDIARY NOT GUARANTEED.—Desirable accounting practice at the present time requires that all of the assets and liabilities of a wholly owned or substantially owned subsidiary be consolidated with the assets and liabilities of the parent company. The rule is not changed when the subsidiary incurs liabilities which are not directly assumed by the parent company.

FUNDED DEBT, CAPITAL STOCK AND SURPLUS.—The elimination of intercompany accounts practically clears the balance sheet of all items which do not appear in the ordinary balance sheet except when there are minority interests. In the case of funded debt, the consolidated balance sheet shows the funded debt of the holding company and of the subsidiaries in the hands of the public set forth in the usual way. Likewise the capital stocks of the holding company and the subsidiaries in the hands of the public are separately stated. In stating the surplus accounts the parts applicable to the holding company and to the subsidiaries are shown. A further separation is usually required to show surplus at date of acquisition (which is capital surplus so far as the holding company is concerned) and surplus earned after date of acquisition. When there are preferred stock issues, the minority interests in the surplus are computed on the basis of preferred stock at par, unless the preferred stocks are entitled to a share in the profits; in such cases an adjustment must be made.

The stock in the hands of the public and the share of surplus applicable thereto, including the share of earned surplus, may be shown together. As stated, the share of surplus accruing to the holding company is treated as a capital item; its share of subsequent surplus is merged with its earned surplus.

PARTIALLY OWNED SUBSIDIARIES.—In many cases the accounts of artially owned subsidiaries are not consolidated with those of the holding mpany. Ownership of 51% of the stock of a subsidiary may insure permanent legal and operating control; but the relations between the holding ompany and the subsidiary may be such as to render it unnecessary or objectionable to consolidate the accounts.

The Anaconda Copper Co. adopted the policy in 1920 of consolidating the ccounts of all subsidiaries which were 75% or more owned. So far as any niformity at all exists this represents **present practice.** Agreements regarding ote issues usually define subsidiary companies as those which are 75% or nore owned.

ATTITUDE OF FEDERAL RESERVE BANK OF NEW YORK.—The importance of the correct statement of the financial position of parent and subsidiary companies for purposes of determining the eligibility of commercial paper and its desirablity for rediscount, is set forth in the following quotations rom a letter written by J. H. Case, deputy governor of the Federal Reserve Bank of New York:

"We have always felt that where a corporation owns all or enough of the aptial stock of another corporation so that the latter corporation might be onsidered either a controlled, a subsidiary, or a proprietary concern, the alance sheet submitted should be the consolidated statement of the parent nd the subsidiary corporation in order that we might have full information n passing upon the eligibility as well as desirability of the paper for rediscount y this bank.

"In addition to the consolidated balance sheet last mentioned, we believe hat there should also be furnished in instances of this kind, separate, individual tatements giving the assets and liabilities of the parent company and each f the controlled, subsidiary, or proprietary concerns, as it sometimes happens hat the borrowing is done not by the parent or principal concern but by the ubsidiary. Moreover, notes of a purely holding company as a general rule re not eligible, although the paper of an operating subsidiary might be, provided its statement showed a reasonable excess of quick assets over current abilities.

"With regard to affiliated companies as distinguished from subsidiaries, hich may not be owned or actually controlled by another corporation but ffiliated through common ownership or otherwise, we do not feel that a conolidated balance sheet discloses the required information, but that each of he affiliated corporations should make separate financial statements.

"Unless complete, detailed statements as indicated herein were available, would be difficult to determine whether or not notes of this character would be ligible for rediscount by us, under the regulations of the Federal Reserve oard."

The **regulations of the Federal Reserve Board** dated August 15, 1924, contain the following with reference to financial statements required as evidence of he eligibility of promissory notes for discount:

"Whenever the borrower has closely affiliated or subsidiary corporations or rms, the borrower's financial statement shall be accompanied by separate nancial statements of such affiliated or subsidiary corporations or firms, nless the statement of the borrower clearly indicates that such note is both ligible from a legal standpoint and acceptable from a credit standpoint: *Provided, owever*, That the Federal reserve bank to which such note is offered for rediscount may waive this requirement until May 1, 1925, in any case where

such borrower and the affiliated or subsidiary corporations or firms have not issued separate financial statements prior thereto."

CORPORATIONS CONTROLLED BY AN INDIVIDUAL.—One of the major reasons for the growing practice of requiring consolidated accounts is the danger of **suppression of unfavorable affiliations.** When one corporation owns all or nearly all of the stock of one or more other corporations, good accounting practice requires consolidation; when an individual owns all or nearly all of the stock of more than one corporation, and there is no corporate ownership, the practice is not settled. The financial manager should be guided by the relations between the three or more parties in interest. When an individual owns the stocks of two corporations and the inter-relations are such that separate accounts might mislead those who are entitled to information, the accounts of all of the jointly owned properties, including the accounts of the individual, should be consolidated. In some cases consolidated accounts alone may not tell the whole story, and separate statements are necessary. It is obvious, however, that separate statements may not exhibit the status of the affiliated interests as a unit; in such cases consolidated statements supported by separate statements should be prepared.

CONSOLIDATED INCOME STATEMENTS.—A consolidated income statement, like a consolidated balance sheet, is made up of the totals of items in the individual statements with intercompany items eliminated.

UNDESIRABLE PRACTICE.—Certain holding companies continue to show as gross earnings only such dividends as have been received during the period from the subsidiary companies. Such practice merits the strongest censure. It is sometimes contended that, inasmuch as the only legal method which a corporation has of distributing profits is by means of dividends, it is improper for a holding company to take credit for part or all of the earnings of a subsidiary company which had not been so distributed. This sounds well in theory, but in practice it is the argument of dishonest men. Almost invariably the sole reason for taking advantage of this technicality is that one or more of the subsidiaries have incurred a net loss in excess of the aggregate profits of all of the companies, and the management of the holding company, wishing to conceal such loss, seeks by subterfuge to justify the action.

The financial manager who is responsible for the preparation of consolidated statements cannot be too careful on this point. Whenever a holding company owns and controls one or more subsidiaries, the profits or losses of the subsidiaries must be stated for the same period as that of the holding company and consolidated. Any other method may lead to gross abuse.

HOLDING COMPANY'S SHARE OF PROFITS AND LOSSES.—If a profit is shown, the amount to be included as the share of the holding company is the proportion that the stock, owned by the holding company, bears to the total capital stock outstanding. It must be assumed that the **minority stockholders** will eventually receive through dividends their share of the profits.

If a loss is shown, and if losses form the chronic condition of the subsidiary, it may as well be recognized that the holding company must assume all of them. This, of course, applies only to those cases in which a subsidiary company is so largely owned by the holding company that the minority interest cannot be depended upon to advance its share of the funds necessary to take care of the loss.

The holding company may carry these advances as an asset, but the financial manager should only place such a value upon these items as the facts warrant. It is reasonably certain that the final decision will be to include all of the loss

in the consolidated income account, although something less than 100% of the stock of the subsidiary is owned.

Changes in Assets and Liabilities

The financial statements for a given period (other than condensed statements for publication) are incomplete if they do not include, in addition to the balance sheet at the end of the period and the profit and loss statement for the period, a statement showing the changes in assets, liabilities and net worth during the period. A comparative balance sheet showing amounts at the beginning and at the end of the period and increases or decreases during the period, serves this purpose. The **comparative balance sheet** may often be supplemented with a statement showing the changes alone. Either form of statement shows the effect of the operations of the period on the financial condition of the business, whereas the profit and loss statement shows merely how much profit or loss resulted and how the profit or loss was made up. A simple statement of changes in assets and liabilities follows:

Increase in Capital

Increase in capital stock:		
Preferred stock issued at par		$100,000.00
Increase in surplus:		
Net profit	$500,000.00	
Less dividends paid	200,000.00	300,000.00
Total increase in capital		$400,000.00

Increase in Net Assets

Increase in current assets		200,000.00
Decrease in current liabilities		50,000.00
Increase in net current assets (see below)		250,000.00
Increase in plant (additions $200.000 less depreciation $50,000)		150,000.00
Total increase in net assets		$400,000.00

Increase in Working Capital

Increase in current assets:		
Cash	$ 25,000.00	
Accounts receivable	135,000.00	
Inventories	100,000.00	
	260,000.00	
Less decrease in notes receivable	60,000.00	
Increase in current assets		200,000.00
Decrease in current liabilities:		
Notes payable	50,000.00	
Accounts payable	50,000.00	
	100,000.00	
Less increase in federal taxes	50,000.00	
Decrease in current liabilities		50,000.00
Increase in net current assets		$250,000.00

Ratios and Comparisons

STANDARD RELATIONSHIPS.—The relationships of the various elements of balance sheets and profit and loss statements are just as important as the elements themselves. Certain more or less standard relationships have been established for business in general and for particular lines of business. Some standards apply only to individual businesses and are not known to outsiders. Standards should be determined so far as possible by each concern. Compari-

sons with ratios derived from published statements of other concerns in the same line of business may help to disclose the strong and the weak places in the financial and operating organization.

Comparisons, both of facts and relationships, with standards and with previous conditions and results must be made before the full significance of a statement of the financial condition of a concern or a statement of the results of operations can be discerned. An individual who is constantly in touch with a business may remember all important facts and relationships and may not need information for comparisons, but an individual who is not close enough to a business to rely on his memory will need facts and relationships in comparative form.

BALANCE SHEET RATIOS.—In his "Borrowing From Your Bank," S. H. Patterson makes the following observations on the balance sheet relationships:

"The segregation of the balance sheet into quick and slow assets and liabilities is the first step in determining **liquid condition.** The next step is a comparison with similar figures for preceding years to see whether the latest figures show an improvement or a less favorable condition.

"Another important test to bring out any unusual conditions is made through the **method of ratio comparisons.** Relationship between items or groups of tems when shown by ratios, and compared with average ratios for similar businesses, discloses rapidly and conclusively facts which would otherwise be difficult to detect. Of course, a fixed set of ratios cannot be used in all lines of business, but where there is a variation from the general average, it indicates that there is some unusual factor or condition to be investigated and studied to determine whether an exception should be made in the case under review.

"To attempt to express the various ratios in figures might be misleading, as some banks work on higher ratios than others, but the manner of computing certain ratios by some credit men is as follows:

Ratios to be Determined	How Determined
Cash position	Current assets (minus inventory) divided by current liabilities.
Quick position	Current assets (including inventory) divided by current liabilities.
Inventory position	Inventory divided by current assets.
Turnover of capital	Net sales divided by capital, surplus and funded debt, at beginning of year.
Net profit on sales	Net income before dividends divided by net sales.
Utilization of plant	Cost of product divided by plant and building account.
Utilization of net worth	Net sales divided by amount of net worth.
Fixed interest charges	Net income before interest on funded debt divided by interest on funded debt.
Debt position	Total liabilities except capital and surplus divided by capital and surplus.
Fixed assets position	Plant and permanent investments divided by capital and surplus.
Trend of collections	Receivables divided by net sales.
Reserve position	Reserves divided by total assets.
Contingent position	Contingent liabilities divided by capital and surplus.
Surplus strength	Total tangible assets divided by surplus account.

"It is, however, a general practice among banks (dependent to a certain extent on the kind of business) to set as general standards that:

Cash should be at least 12% of the amount of the current liabilities;
Cash and receivables should at least equal the total current liabilities;
Current assets should be at least double the amount of current liabilities;
Inventories should be about 50%, and never exceed 60% of current assets.

"More concretely expressed this may be indicated as follows:

		% of Current Assets
Cash	$ 4,800	6%
Receivables	35,200	44
Inventory	40,000	50
Total current assets	$80,000	100%
Current liabilities	40,000	
Per cent of current assets to current liabilities		200%

"It is further held generally that:

Accounts receivable should always represent merchandise transactions and that notes receivable (excluding trade acceptances) should be small in proportion to the accounts receivable, particularly in a business where there is a rapid turnover of merchandise;
Notes payable should never exceed the net worth;
Notes payable for merchandise (other than trade acceptances) should be small, as otherwise it indicates failure to take advantage of discounts;
Unsecured notes payable to banks or sold through brokers should not exceed one-third of the net worth. (Net worth is the amount of capital and surplus after deducting goodwill, trade-marks, patterns, etc., except the amount of their known realizable cash value);
Annual sales should equal and in general be greater than the amount of capital;
Net income before interest should be double the interest on funded debt.

"While a bank may have definite standards for the purpose of disclosing weak spots in a business, that does not necessarily mean that it will not make a loan under less satisfactory conditions, if there is confidence in the men running the business or if other conditions indicate that the business is improving its financial position."

INCOME AND EXPENSE RATIOS.—Some important income and expense relationships follow:

Costs, expenses and profits to sales or gross income;
Net profits to capital stock, net worth, and total capital used;
Inventories, accounts receivable, fixed assets and total capital to gross business;
Indirect expenses to direct expenses;
Profits from various departments, products and other sources to amounts of investment.

Financial Reports

REPORTS FOR VARIOUS PURPOSES.—Usually a single form of financial report (including financial statements) will not meet all the needs of a concern. Reports and statements for different purposes must vary both in arrangement and in volume to serve their varying purposes satisfactorily. A report which satisfies the needs of an executive who is intimately acquainted with all the

ramifications of a business may fall far short of supplying the needs of a new executive who is just beginning to get acquainted with the business. A report which is prepared for publication and which is, therefore, condensed will not be sufficient for a banker who is to underwrite an issue of the concern's securities.

Not only must there be variations in the volume of information presented in reports for different purposes, but there must also be variations in the form in which the reports are prepared. Idiosyncrasies of individuals for whom reports are prepared as well as differences in the uses which the different individuals make of the reports are sometimes important.

REPORT TO STOCKHOLDERS.—The stockholders compose the corporation and are entitled to information as to its condition and progress. Frequently, however, there are trade reasons for withholding the more confidential details from them. It is obvious that if a full showing of the corporate business and the results of its operations were made annually to the stockholders of a corporation, it would become public property and serious results might follow. Primarily for this reason, but also because the stockholders do not need nor usually desire fully detailed statements of the corporate business, the reports made to the stockholders are usually general in their character. But there is a trend towards greater detail and more information. On the whole the more prosperous the corporation, the more the stockholders learn of actual conditions. It may well be that before long a "short and simple" report will be referred to as the annals of the poor corporation. The report to the stockholders generally takes the form of a statement of earnings designed to give a view of the company's operations, together with a condensed balance sheet. In many corporations, the **treasurer** makes no independent report, the president's report covering the general affairs and conditions of the corporation together with its finances and plans for the future. This is true, for instance, of the United States Steel Corporation, where but one formal report—that of the chairman of the board—is made to the stockholders. In the majority of smaller or closely held corporations, however, the treasurer makes his own report to the stockholders, covering in it such details of the financial affairs of the corporation as the directors deem it expedient for the stockholders to know; or, to express it otherwise, all financial details of interest to the stockholders, the publication of which will not result in injury to the company's business.

Where but one formal report is made to the stockholders and this report is made by the president, the treasurer or the treasurer's department will, of course, supply the president with material for the financial portion of the statement. In any case, the two officials should work in sufficiently close touch to prevent any serious overlapping of their reports.

PERIODICAL REPORTS.—The chief executives of most large concerns are kept informed in regard to the financial condition of their businesses and the results of operations through reports issued periodically throughout the year in addition to special reports issued as needed. **Complete reports** are usually issued each month, but reports relative to certain phases of the business may be issued on a daily or weekly basis.

Monthly reports for officers, executive committees and directors should contain concise explanations of important items or transactions and statements such as the following (see also Sections 4 and 5):

Balance sheet in detail with supporting schedules.
Comparative condensed balance sheet, showing comparison with beginning of month and beginning of year.

Income statement (with supporting schedules) for month and year to date compared with same month and same part of preceding year.
Statements of sales, costs and gross profits by departments, products, etc.
Comparisons of actual income, expenses and changes in assets and liabilities with budget.
Statistics, ratios, etc.

Periodical reports relating to the affairs of particular departments and divisions of the business should be rendered by the financial manager to heads of departments and divisions. These reports should ordinarily contain only such information as is required for the efficient conduct of the activities of the particular department.

REPORTS TO THE TREASURER.—The outline below of information required by the treasurer is taken from "Financial Reports for Industrial Executives" by the Bureau of Commercial and Industrial Affairs of the Boston Chamber of Commerce. In order to provide for the financial needs of the company, the treasurer requires information on the following five points:

1. Immediate Cash Requirements.—By the immediate future is meant a period one month in advance. The predictions for this period can be made in more detail and with greater accuracy than is possible for a longer period. All individual items of definite amount and maturity such as notes receivable or payable can be accurately predicted. Other items can be predicted on the basis of the actual figures and relationships in the past. The average payments for supplies and pay roll and the average receipts from sales, for example, would form the basis for predicting the amount of these items for the coming month. A statement of the **contingent liabilities** of the company should probably be made once a month, too.

2. Future Cash Requirements.—The treasurer needs to know how matters of **business policy for the future,** such as expansion of plant and equipment, addition of new lines of product, dividend policy, prospective issues of new securities, etc., will affect the financial requirements. He also wants to know how the **business cycle,** the **seasonal movement** and the normal increase in the company's business will vary the need for cash.

Some of the larger cash transactions, such as issue of bonds and stocks, retirement of bonds, purchase of treasury stocks, sale or purchase of fixed assets and payments of bond interest or principal, are definitely known both as to amount and maturity some time in advance. These items can be accurately estimated and by means of a tickler file can be automatically brought to the attention of the treasurer. The effect of these items can be studied by showing them in estimated balance sheets as of various future dates.

Future cash requirements would ordinarily cover a period more than 3 months ahead.

3. Present Cash Position.—A statement of present cash position gives the treasurer accurate information on the previous day's transactions without going into details of past transactions. It also gives him the exact situation at the beginning of the current day, both as regards cash and readily marketable securities. It will also tell him of the day's requirements.

4. Past Cash Transactions.—The treasurer needs information in regard to past cash transactions not so much as a check on the operation of the company, but for the purpose of enabling him to compare the actual figures of the past with the estimated ones, to study trends, and to estimate for the future. The items and relationships which are to be presented will depend largely upon the

ones needed for the statement of present cash position. This information should probably be obtained once a month.

5. Efficiency of Financial Department.—The financial executive should have some means of knowing how well his department is progressing toward the aims stated above. He should know whether his department is operating at an excessive cost or not, and, if so, why. He should also know whether or not the business is being provided with sufficient funds or too much cash, and whether or not his loans are costing him too much. This information also should probably be presented once a month.

The forms at the end of this Section (Figs. 12 to 24) are suggested in "Financial Reports for Industrial Executives" as appropriate forms for presenting various types of financial reports to the treasurer.

CERTIFIED STATEMENTS.—Some few years ago the American Association of Public Accountants, now the American Institute of Accountants, addressed an inquiry to the bankers throughout the country asking them to express their attitude toward certified financial statements as a basis for credit. Eight hundred and forty-four replies were received and classified as follows:

Strongly in favor	121
Favorable	501
Opposed	15
Strongly opposed	5
Non-committal	202

It is obvious from the foregoing that the financial manager who arranges to have his accounts certified to by professional accountants may greatly benefit therefrom and it cannot possibly do him any harm.

REQUIREMENTS OF FEDERAL RESERVE BOARD.—The following requirements relating to financial statements are taken from the Regulations of the Federal Reserve Board dated August 15, 1924:

REGULATION A—SECTION IV. PROMISSORY NOTES

Evidence of Eligibility and Requirement of Statements.—A federal reserve bank must be satisfied by reference to the note or otherwise that it is eligible for discount. The member bank shall certify in its application whether the note offered for discount has been discounted for a depositor other than a bank or for a non-depositor and, if discounted for a bank, whether for a member or a non-member bank. The member bank must also certify whether a financial statement of the borrower is on file with it.

A recent financial statement of the borrower must be on file with the member bank in all cases, unless the note was discounted by a member bank for a depositor (other than a bank) or for another member bank, and—

1. It is secured by a warehouse, terminal, or other similar receipt covering goods in storage, by a valid prior lien on livestock which is being marketed or fattened for market, or by bonds or notes of the United States; or
2. The aggregate of obligations of the borrower discounted and offered for discount at the federal reserve bank by the member bank is less than a sum equal to 10 per cent of the paid-in capital of the member bank and is less than $5,000.

REQUIREMENTS OF NEW YORK STOCK EXCHANGE.—The requirements of the Committee on Stock List of the New York Stock Exchange, published on July 1, 1924, contain the following provisions with reference to financial statements:

REQUIREMENTS FOR ORIGINAL LISTING

Every application for an original listing of capital stock shall recite:

Financial statements; (1) earnings for preceding five years, if available with interest harges, depreciation and federal taxes; (2) income and surplus account of recent date r at least two years, if available; (3) balance sheets of same dates; (4) balance sheet iving effect to recent financing, if any; (5) similar accountings for predecessor, constituent, ubsidiary, owned or controlled companies; (6) corporations consolidated within one year revious to date of application, income and surplus account and balance sheet of all com- anies merged and balance sheet of applying corporation; (7) if in hands of receiver ithin one year previous to date of application, (a) income account and balance sheet of eceiver at time of discharge, and (b) balance sheet at close of receivership.

An application for an original listing of bonds shall recite all information required for sting stock.

REQUIREMENTS FOR LISTING OF ADDITIONAL AMOUNTS

Refer to previous applications and last application by number and date, and recite:

Income account, surplus account and balance sheet of recent date, also for constituent, ubsidiary, owned or controlled companies, or a consolidated income account, consoli- ated surplus account and a consolidated balance sheet.

PAPERS TO BE FILED WITH APPLICATIONS

In addition to application for listing, the following papers must be filed:

For Stocks:
- Certified copy of income account, surplus account and balance sheet contained in application.

For Bonds:
- All papers required for listing stocks.

For Securities of Reorganized Corporations:
- All papers required for listing stocks and bonds.
- Certified income and surplus account and balance sheet at close of receivership, if available.
- Certified balance sheet at date of reorganization.

For additional amounts:
- (Requirements similar to those for original listings.)

For Certificates of Deposit, Voting Trust, etc.:
- Papers required for listing stocks and bonds.

AGREEMENTS

To be made part of applications where applicable:

To publish once in each year and submit to the stockholders, at least fifteen days in dvance of the annual meeting of the corporation, a statement of its financial condition, consolidated income account covering the previous fiscal year and a consolidated balance heet showing assets and liabilities at the end of the year; or an income account and bal- nce sheet of the parent company and of all constituent, subsidiary, owned or controlled ompanies.

STATEMENTS PREPARED FOR STOCKHOLDERS.—An example of an ncome statement and a balance sheet prepared for stockholders follows:

Calendar Years—	1925	1924	1923	1922
Gross Income less Operating Expenses	$1,740,627	$2,088,442	$2,298,063	$1,094,534
Depreciation	172,932	176,132	160,911	130,162
Reserved for Taxes	290,706	388,752	543,570	92,687
Net Income	1,276,989	1,523,558	1,593,582	871,685
Previous Surplus	1,755,403	2,181,845	1,450,764	1,354,078
Total Surplus	3,032,392	3,705,403	3,044,346	2,225,763
Dividends Declared	1,000,176	950,000	862,500	775,000
Goodwill Written Off	500,000	1,000,000		
Credit to Tax Reserve	70,000			
Profit and Loss Surplus	$1,462,216	$1,755,403	$2,181,846	$1,450,763

BALANCE SHEET, DECEMBER 31

ASSETS

	1925	1924
Land, Buildings and Equipment	$ 4,325,051	$ 4,261,004
Patents, Goodwill and Trade-marks	4,000,000	4,500,000
Cash	1,546,733	1,513,979
Investment in Securities	258,000	248,963
Accounts Receivable and Materials	2,603,301	2,499,403
Total	$12,733,085	$13,023,349

LIABILITIES

Capital Stock	10,000,000	10,000,000
Current	166,920	210,437
Reserves	803,979	776,259
Dividends Declared	299,970	281,250
Surplus	1,462,216	1,755,403
Total	$12,733,085	$13,023,349

REQUIREMENTS OF NEW YORK CURB MARKET.—The rules and regulations of the New York Curb Market contain the following:

It shall be required of all listed companies:

1. To publish annually an income account and balance sheet.

2. To publish and submit to the stockholders at least ten days in advance of the Annual Meeting of the Company, a statement of its physical and financial condition, an income account covering the previous fiscal year, and a balance sheet showing assets and liabilities at the end of the year; also annually an income account and balance sheet of all constituent, subsidiary, owned or controlled companies, and to furnish the Exchange with certified copies thereof.

Information in connection with preparation of documents to be submitted in compliance with listing requirements.

Under requirement Nos. 1 and 1a the following procedure should be strictly observed:

The accountant must be a recognized practicing public accountant in good standing.

The Balance Sheet must be prepared in accordance with good accounting principles.

Schedules must accompany the Balance Sheet showing a clear analysis of the following:

PROPERTIES: How acquired. If by stock or cash. Give amounts of each.

UNPAID STOCK SUBSCRIPTIONS, and stock sales agreement, if any.

CAPITAL STOCK: How issued and for what purpose. Amount realized. Explain in detail.

EARNINGS AND EXPENSES: Either a complete detailed Profit and Loss Statement or in the case of companies which are developing and have not reached production stage, a statement of Cash Receipts and Disbursements will be accepted.

SURPLUS: How acquired. Complete condensed analysis prepared for a number of years. Paid-in Surplus and other increases must be clearly separated from Earned Surplus.

All other assets or liabilities which should properly be analyzed to clearly set forth the financial condition.

All accounts must be in accord with minutes of meetings of Stockholders and Board of Directors.

We suggest that the accountant when certifying use the following form:

"I have examined the minutes of all meetings of the stockholders and Board of Directors and the books of accounts of the.....Company and hereby certify that the accompanying balance sheet, more fully shown in the detailed exhibits and schedules which are a part thereof, truly represents the condition of the said company as at .....”

All financial statements are submitted to the Consulting Accountant appointed by the New York Curb Market for approval as to form, substance and agreement with the requirements of the By-Laws. Any inquiries as to accounting procedure will be answered by him only through the medium of the Exchange.

REPORT FOR PROSPECTIVE PURCHASER OR INVESTOR.—A report for a prospective purchaser of or investor in a business is not complete if it contains only balance sheets and income statements of recent years. Unless the purchaser or investor is fully informed about the situation, such a report should, according to circumstances, contain pertinent information relative to such subjects as the following:

Description of plant or other **property**; including location, condition, capacity, etc.
Description of **products**; including trade names, grade, competitive features, etc.
History of business
Organization
Methods of doing business
Future prospects

GRAPHIC CHARTS.—Graphic charts should be used in financial reports whenever they will serve to present information more clearly than other forms.

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS.—A statement of cash receipts and disbursements should show **cash on hand at the beginning and the end of the period** and **receipts and disbursements** during the period detailed or classified according to the requirements of the particular case. A simple example follows:

CASH RECEIPTS AND DISBURSEMENTS

YEAR ENDED DECEMBER 31, 1925

CASH ON HAND January 1, 1925		$ 50,275.61
RECEIPTS:		
Accounts Receivable:		
Customers	$150,125.60	
Officers	10,000.00	
Bank Loans	25,000.00	
Sale of Capital Stock	20,000.00	
Interest on Bank Balances and Liberty Bonds	1,261.32	
Miscellaneous	116.25	206,503.17
		256,778.78
DISBURSEMENTS:		
Accounts Payable—Merchandise and Expenses	106,776.81	
Bank Loans	25,000.00	
Interest on Bank Loans	750.00	
Dividends	70,000.00	202,526.81
CASH ON HAND December 31, 1925		$ 54,251.97

STATEMENT OF AFFAIRS.—The balance sheet is a statement of the financial condition at a specific date of a going concern. Such a statement is adequate for ordinary needs so long as the concern continues to operate and continues to maintain its standing, but if the concern faces the prospect of liquidation the liquidating value of its assets becomes important and a statement showing the financial condition of the concern on the basis of liquidating values is required. Such a statement, which is sometimes called a statement of affairs, is designed to show the **estimated liquidating value of assets** in the order in which they are likely to be liquidated and liabilities in the order of priority. If any liabilities are fully secured by specific assets such liabilities are shown as offsets to the particular assets, and if any liabilities are partially secured by specific assets such assets are shown as offsets to the particular liabilities. An example of a statement of affairs is shown on page 240.

A. B. C. COMPANY

STATEMENT OF AFFAIRS

As at December 31, 1925

ASSETS	Book Value	Estimated Shrinkage	Expected to Realize
Cash	$ 1,000		$ 1,000
Accounts receivable	50,000	$ 10,000	40,000
Inventory	100,000	50,000	50,000
Land and buildings	100,000	60,000	(a) Contra
Machinery and equipment	100,000	75,000	25,000
	$351,000	$195,000	116,000
Deduct:			
Claims having priority:			
Accrued payroll, (b) contra $ 2,000			
Estimated liquidating costs 30,000			32,000
Estimated amount available for payment of unsecured claims			84,000
Estimated deficiency to be borne by creditors			26,000
Total unsecured claims			$110,000

LIABILITIES	Book Value	Expected to Rank
Unsecured claims:		
Accounts payable:		
Trade	$ 40,000	$ 40,000
Others	10,000	10,000
Secured claims:		
Mortgage on real estate $100,000		
Less: Estimated value of security, (a) contra 40,000		(a) Contra
Balance unsecured $ 60,000	100,000	60,000
Claims having priority:		
Accrued payroll, (b) contra	2,000	(b) Contra
	152,000	110,000
CAPITAL		
Capital stock	150,000	
Surplus	49,000	
	$351,000	$110,000

STATEMENT OF DEFICIENCY.—A statement of affairs, or any statement designed to show the financial condition of a concern on the basis of liquidation, is often accompanied by a reconciliation of the concern's balance sheet and its statement of affairs. This statement is sometimes called a deficiency account or a statement of deficiency.

A. B. C. COMPANY

STATEMENT OF DEFICIENCY

As at December 31, 1925

Estimated shrinkage of assets, per statement of affairs:		
Accounts receivable	$ 10,000	
Inventory	50,000	
Land and buildings	60,000	
Machinery and equipment	75,000	$195,000
Estimated liquidating costs		30,000
		225,000
Less: Capital stock	150,000	
Surplus	49,000	199,000
Deficiency to be borne by creditors		$ 26,000

CASH PREDICTIONS

Receipts	This Month	Last Month	Percentages +	Percentages −	This Month Last Year	Percentages +	Percentages −
Collections							
Notes, etc.							
Income from Investments							
Other Items (Listed)							
Total							
Disbursements							
Weekly Payrolls							
Monthly Salaryrolls							
Miscellaneous Expenses							
Bills and Invoices							
Notes, etc.							
Dividends							
Taxes							
Interest							
Insurance							
Miscellaneous							
Total							
Excess Receipts / Disbursements							

Fig. 12. Cash Predictions—Master Sheet for Period One Month in Advance

CASH REQUIREMENTS FOR FACTORY BRANCHES

Plants	Receipts			Disbursements								Difference	
		Misc.	Total	W'kly Pay-roll	M'thly Sal'y-roll	Bills and Inv.	Notes Pay-able	Taxes	Insur.	Misc.	Total	Short	Over
New York													
Boston													
Philadelphia													
Chicago													
Total													

CASH REQUIREMENTS FOR SELLING BRANCHES

Branches	Receipts				Disbursements							Difference	
	Col-lect's	Notes Rec.	Misc.	Total	W'kly Pay-rolls	M'thly Salary rolls	Sales-men's, Exps.	Bills and Inv.	Notes Pay-able	Misc.	Total	Short	Over
New York													
Boston													
Philadelphia													
Chicago													
Total													

GENERAL OFFICES

Branches	Receipts				Disbursements									Difference	
	Notes	Inc. from Invest.	Misc.	Total	W'kly Pay-roll	M'thly Salary roll	Bills and Inv.	Gen. Exp.	Notes	Divid. and Int.	Taxes	Misc.	Total	Short	Over
New York															
Boston															
Phila.															
Chicago															
Total															

Fig. 13. Three Forms Subordinate to "Cash Predictions," Fig. 12

WORK SHEET FOR ESTIMATED COLLECTIONS

As of..... For Month of.....

	Preliminary Receivables	Current Month's Sales: Actual 15 Day	Current Month's Sales: 15 Day Ratio	Current Month's Sales: Predicted Total	Current Month's Collections: Actual 15 Day	Current Month's Collections: 15 Day Ratio	Current Month's Collections: Predicted Total	Predicted Receivables as of	Next Month's Est Sales: Estimated Total	Next Month's Est Sales: 15 Day Ratio	Next Month's Est Sales: Estimate for 15 Days	Estimated Rec. Bal. as of ... Plus Est. 15 Days Sales	Collection Ratio: For	Collection Ratio: For	Collection Ratio: Year Ago	Collection Ratio: Used for Est.	Est. Amount of Collections
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				2÷3×100			5÷6×100				9×10	8+11					12×16
Eastern Division	$	$		$	$		$	$	$								
Western Division																	
Total Divisions																	
Boston Branch																	
New York Branch																	
Chicago Branch																	
Seattle Branch																	
Philadelphia Branch																	
Portland Branch																	
Total Branches																	
Total	$	$		$	$		$	$	$								

FIG. 14. Monthly Estimate of Collections

NATURE OF
CONTINGENT LIABILITIES

Liability	Explanation	Dept.	Amt.
Endorsements			
Notes receivable disc.			
Securities of subsidiaries			
Open market orders			
Contracts outstanding			
Total			

Fig. 15a. Monthly Statement of Contingent Liabilities

AMOUNT AND TERMS OF
CONTINGENT LIABILITIES

Liability	Description	Amount	Terms	Date	
				Incurred	Settled
Endorsements					
Notes receivable disc.					
Securities of subsidiaries					
Open market orders					
Contracts outstanding					
Total					

Fig. 15b. Statement Showing when Contingent Liabilities are Incurred and when Settled

(Name of Company)

FORECAST OF RECEIPTS AND EXPENDITURES

Six Months from _____ 192__ to _____ 192__

(Unit $1,000)

Est'd.	Ref.	Actual									Total
			RECEIPTS:—								
			Regular Sales—Net								
			Misc. Sales								
			Dividends								
			Misc. Receipts								
			Total								
			EXPENDITURES:								
			Raw Materials								
			Payroll								
			Expense								
			Supplies								
			Fuel and Power								
			Total Operating Exp.								
			Interest & Discount on Loans								
			Coupon Interest								
			Federal and State Tax								
			Dividends								
			Plant—Manufacturing								
			" Other								
			Redemption of Capital Stock								
			Retirement of Funded Debt								
			Total Expenditures								
			Cash Increase or Decrease								
			Bank Bal.—Beginning of Mo.								
			Total								
			Bank Bal.—End of Month								
			Maturities During Period:—								
			Bank Loans								
			Commercial Paper								
			Acceptances								
			Selling House Advances								
			Total Maturities this Period								
			Total Obligations of the above nature								
REMARKS:											

FIG. 16. Estimate of Receipts and Expenditures

TO THE TREASURER—1923

Cash	
Balance in the bank yesterday morning	
Cash in office	
Deposited yesterday	
(Including receipts from branches)	
Gross balance yesterday	
Less disbursements yesterday	
Cash this morning	
Less balance to keep credit lines	
(Total line of credit)	
Cash available for disbursement	
To be paid today	
Bank loans to be paid	
(Total outstanding)	
Commercial paper to be paid	
Sight drafts	
L/C drafts	
Acceptances	
General accounts payable	
Basic raw materials (special accounts)	
Total to be paid	
Surplus	
Shortage of cash (red ink)	
Readily marketable securities	

(Change in cash position since yesterday _____)

Signed _____

CONSOLIDATED STATEMENT

Date _____

	Bank A	*Bank B*	*Total*
Balance yesterday			
Deposits yesterday			
Paid yesterday			
Balance today			
Loans to be paid			
Other payments			
Final balance today			

FIG. 17. Daily Statement of Cash Position

DAILY CASH REPORT OF BRANCHES

Date , 1923

BRANCH	[1] CASH BALANCE YESTERDAY	[2] RECEIPTS YESTERDAY	[3] DISBURSEMENTS YESTERDAY	[4] CASH BALANCE TODAY
Chicago	19,000	5,000	6,000	18,000
San Francisco	10,000	4,000	6,000	8,000
Total	29,000	9,000	12,000	26,000

FIG. 18. Daily Statement of Cash at Several Branches

DAILY REPORT ON BANK BALANCES

Date , 1923

1 Bank	2 Keep	3 Balance Yesterday	4 Deposit Yesterday	5 Disbursements Yesterday	6 3+4-5-2=6 Available Balance
Old Colony	21,000	35,000	8,000	10,000	12,000
Liberty	16,000	25,000	8,000	9,000	8,000
In Office Petty Cash					
Total	37,000	60,000	16,000	19,000	20,000

FIG. 19. Daily Statement of Bank Balances

REPORT ON BROKERS

Date , 1923

Broker	Date Due	Amount	Fiscal Agent
	May 1, 1923	100,000	Sec. Nat. Bank
A	May 15, 1923	50,000	" " "
	June 1, 1923	75,000	" " "
	April 15	125,000	First Atlantic
B			
	April 25	60,000	National City
C			
	April 17	90,000	Slaters Trust
D	June 2	70,000	" "
Total		570,000	

FIG. 20. A Summary of Commercial Paper Sold through Brokers and Outstanding

OBLIGATIONS

Date , 1923

Bank	6 Balance Available	7 Total Bank Loans	8 Bank Loans Today	9 Commercial Paper Today	10 Acceptances Payable Today	11 L/C Drafts Payable Today	12 Sight Drafts Today	13 Balance After Paying Obligations
Old Colony	12,000	70,000	1,000	2,000	1,000	500	200	7,300
Liberty	8,000	15,000		2,000			700	5,300
Total	20,000	85,000	1,000	4,000	1,000	500	900	12,600

EXPENDITURES

Date , 1923

Bank	13 Balance After Paying Obligations	14 Payroll	15 Salaries	16 General Accounts Payable	17 Any Basic Raw Material	18 Any Basic Raw Material	19 Balance After Making Payments
Old Colony	7,300	2,000	500	1,000			3,800
Liberty	5,300				1,000	1,000	3,300
Total	12,600	2,000	500	1,000	1,000	1,000	7,100

13 = 6-8-9-10-11-12

19 = 13-14-15-16-17-18

FIG. 21. Daily Statement of Obligations and Expenditures

DAILY REPORT ON MARKETABLE SECURITIES

Date 1923	Total Cost	Market Price Per Share	Price A Week Ago	Number Held	Present Total Value	Total
Bonds						
A. B. 4s	21,000	101	102	20	20,200	
C. D. 4½s	26,000	105	103	23	24,150	
Total	47,000			43	44,350	44,350
Stock						
D. P. Com.	122,000	109	105	1,300	141,700	
X. Y. Pref.	21,000	62	58	350	22,200	
Total	143,000			1,650	163,900	163,900
Paper	100,000				100,000	100,000
Total	290,000					308,250

Fig. 22. Daily Statement of Marketable Securities

CASH TRANSACTIONS

Receivables	This Month	Estimated This Month	Percentage +	Percentage —	Last Month	Percentage +	Percentage —	This Mo. Last Year
Collections								
Notes								
Income								
Total								
Disbursements								
Payables								
Salary								
Bills and Invoices								
Miscellaneous Expenditures								
Notes								
Dividends								
Interest								
Taxes								
Insurance								
Miscellaneous								
Total								
Loans — Made								
Loans — Liquidated								

Fig. 23. Monthly Report of Cash Transactions

MONTHLY REPORT ON COLLECTIONS*

CUSTOMERS ONLY

Month of , 1922.

	ESTIMATED First of Month Receivables Bal. plus Sales First 15 Days	Collections	Collection Ratios	ACTUAL First of Month Receivables Bal. plus Sales First 15 Days	Collections	ACTUAL COLLECTION RATIOS This Mo.	Last Mo.	Same Mo. Last Year
Eastern Division	$000,000.00	$000,000.00	00	$000,000.00	$000,000.00	00	00	00
Western Division	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
Boston Branch	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
New York	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
Chicago	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
Seattle	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
Philadelphia	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00
Total Blank Mfg. Co...	000,000.00	000,000.00	00	000,000.00	000,000.00	00	00	00

*"Collections" include credits to Accounts Receivable, and to Notes, Trade Acceptances and Foreign Drafts Receivable, through records of Cash Received.

FIG. 24. Monthly Statement of Collections

SECTION 4

BUDGETS

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SECTION 4

BUDGETS

WHAT A BUSINESS BUDGET IS.—The business budget is a modern adaptation to business of an ancient method of controlling public or social receipts and expenditures. It is one of the rare instances in which the business man has been able to learn something from the politician. The business budget is not in general use, but businesses which have adopted the budget system are the most progressive and profitable in the country. It is an innovation which may be tried out without risk.

The budget is prepared from estimates or forecasts, for a definite future period, of the expected operations in each functional department of a business. The forecast of each department is dependent upon the anticipated activities of all other departments; for example, a manufacturing program must be based upon expected sales and the estimate of sales is limited by the producing capacity of the factory.

THE TENTATIVE BUDGET.—The forecasts of all departments are combined to show a statement of estimated cash receipts and expenditures, an estimated income or operating statement and an estimated balance sheet as at the end of the period. These three statements as first estimated and compiled comprise a tentative budget to be submitted to the heads of the business for revision and approval. Their responsibility is to denominate the volume of sales which in their judgment ought to shape financial policy for the ensuing period. The entire budget is made to co-ordinate with the policy thus dictated. **Standards of performance** are established for certain departments while **limits of expenditure** are placed upon others. Overhead expenses, costs and projects for extensions and replacements, as first estimated, are adjusted and readjusted until a budget is finally struck that appears to insure fair profits and a sound financial condition. The **approved budget** becomes, for the time being at least, the program for the forthcoming period.

Actual results are compared with estimates every month and plans are revised instantly whenever the trend of affairs is favorable to a change in the budgetary program, or the executives take a different view of future prospects.

A well co-ordinated budget can be developed only by continuous operation. If the procedure is permitted to lapse in a period of prosperity, no budget will be in existence as signs of adversity appear and at that moment the need of a budget is most imperative. In prosperous times profits ought to be greater with the aid of a budget than without one.

Budgetary methods suitable for a typical manufacturing business, as described in this section, have their applications in every industry, in mercantile establishments and other enterprises. Applications differ in degree, not in principle. If one commodity is produced and sold, the problem is relatively simple; as commodities multiply and lines are diversified, the problem becomes complex.

The **purpose of a budget** is co-ordinated control of the following factors which are present in every business:

1. Margin between selling prices and costs—that is, gross profit.
2. Regulation of expenses—which with (1) determines net profit.
3. Investment in inventories and rate of turnover.
4. Expenditures for plant additions or extensions, betterments, improved equipment, replacements and repairs.
5. Availability of capital: short-term notes, long-term notes, bonds and capital stock of different classes.
6. Policy relative to dividends and appropriations of surplus profits.

THE BUDGET PERIOD.—The budget period will vary even with concerns engaged in the same line of business. Plans for the future must allow for financing, purchasing, designing, production and distribution of the products. Into every budget calculation there enters the element of time; for instance, the time from receipt of materials to delivery to the first operation, the time of manufacture and the time that finished goods shall be carried until shipped.

Ordinarily the budget period should not be less than the time required for a complete cycle from purchase of raw materials to sale of finished goods. In a seasonal business the budget period should be long enough to include the months of greatest activity and those of comparative dullness. Periods of three months, six months or one year are the more common terms. There should be a **monthly revision** of the budget: the first month should be eliminated and a new month should be added, so that a continuous forecast and operating plan are scheduled every month for a standard term.

If a concern has insufficient capital to finance its operations, its chances of securing the needed additional capital on favorable terms ought to be better when a summary of the budget with a definite plan for repayment of loans is submitted with the application for funds. Such a plan would hardly be effective if the budget should be for too short a period. Three months would be the minimum. The illustrations of procedure in this section are based on a budget period of six months.

ORGANIZATION FOR PREPARATION OF THE BUDGET.—The man responsible for the preparation of the budget should be intimately familiar with the affairs of the concern. He should understand the operating problems thoroughly and be possessed of native common sense and good judgment. For a business of any considerable size the head of the budget department will need a staff of assistants.

The **first step** in the establishment of budget routine is to classify activities or functions and to fix the responsibility for the preparation of estimates of the probable operations for the budget period. Selling, production, purchasing, general administration and financing are the main functions in any business.

Ordinarily, each of these functions is specifically in charge of an officer of the corporation or a partner of the firm. He is the one responsible for preparing an estimate of the probable revenue and expenditure within his particular field. The chief executives should be the members of a **budget committee** to revise and finally approve the budget unless the board of directors assumes responsibility for final approval.

Functional heads, of course, will take advantage of the knowledge and experience of employees and, wherever possible, should require written estimates from competent employees, to be approved or revised according to the judgment of their superiors. In the selling field, for example, preliminary estimates of the probable volume of business for the budget period might be prepared in

the first instance by salesmen, confirmed or revised by the sales manager, and submitted for approval to the officer or partner in charge of sales. No rule can be laid down for the routing and approval of estimates from the lowest to the highest authority; much depends upon the character of the organization and the caliber of the employees. In the event of differing opinions on major estimates, more than one forecast may deserve consideration by the budget committee, especially the varying forecasts of expected volume of business which, as previously stated, is the primary factor to be settled by the committee as the foundation of the entire budget.

It is the duty of the individual in charge of preparation of the budget to see that the **departmental forecasts** and other sections of the budget are compiled well in advance of the beginning of the budget period; to furnish functional heads with information relative to past performance; to confer with functional heads for the co-ordination of their forecasts; to prepare the estimated balance sheet and statement of profit and loss; to gather all the data and to submit it in an orderly manner to the budget committee.

THE SALES FORECAST—GAUGING SALES POSSIBILITIES.—All the available knowledge and experience in the organization should be brought to bear upon the problem of forecasting probable sales. Responsibility for the preparation of the sales forecast, as well as for other forecasts related to selling described later, rests upon the sales executive. The budget head should see that the proper forms are supplied, together with helpful information regarding the sales in prior periods.

The following outline of desirable information for the purpose of gauging sales possibilities is found in a leaflet entitled "The Sales Budget" issued by the Metropolitan Life Insurance Co.:

(A) Desirable Information Regarding the Past

1. Sales of the last and preceding years shown in dollars and quantity for:
   - (a) Commodities
   - (b) Styles
   - (c) Departments
   - (d) Agencies and branches
   - (e) Salesmen
   - (f) Territories

(B) Desirable Information Regarding the Present

1. Statistics of the individual company and, if procurable, for the industry:
   - (a) Production
   - (b) Shipments and sales
   - (c) Orders—new, canceled and unfilled
   - (d) Plant capacity
   - (e) Percentage of present operation to capacity
   - (f) Operating costs
   - (g) Wages and number of employees
   - (h) Stocks on hand
2. Statistics applying to industries generally (popularly known as "business barometers"):
   - (a) Pig iron and bituminous coal production
   - (b) Stock exchange quotations
   - (c) Current quotations for week, of cotton, corn, copper, etc.
   - (d) Weekly Federal Reserve report and government crop report
   - (e) Wholesale price indices
   - (f) Bank clearings

(g) Foreign trade
(h) Gold movements
(i) Interest rates
(j) Status of federal finances
(k) Business failures
(l) Corporation earnings
(m) Railroad net earnings, etc.

The foregoing statistical information is obtainable through:

(a) Daily papers
(b) Financial journals
(c) The private statistical services
(d) The monthly bulletin of the Federal Reserve Board
(e) The monthly Survey of Current Business and the issue of Commerce Reports, both published by the U. S. Department of Commerce
(f) The publications of the U. S. Department of Labor

(C) Helpful Information in Determining Sales Possibilities

1. Population:
   By cities, towns, countries and in large cities by blocks, for staples, such as salt, sugar, coffee.
2. Users—Number of:
   Where such indicates the limit of consumption, e.g., market for electrical devices fixed by number of users of electricity.
3. Occupations:
   As indicating specific needs, e.g., physicians, as buyers of automobiles.
4. Climate:
   Season of heavy rain-fall or snow, e.g., rubber goods.
5. Enterprises—Number of:
   For certain commodities the firm, rather than the individual, is the logical purchasing unit—applicable to office appliances.
6. Readers—Number of:
   Of newspapers and magazines in any given territory, e.g., soap and toilet articles marketed largely through advertising.
7. Local Business Conditions:
   Affect commodities variously—staples, like salt, inconsiderably, farm implements and building material directly.

PREPARATION OF SALES FORECAST ILLUSTRATED.—Work upon the sales forecast should start early so that it may be completed in time to prepare the correlated production, purchasing and financing forecasts well in advance of the beginning of the budget period. Sufficient time must be allowed to put into execution the most carefully laid plans if they are to become effective within the budget period.

No formal method of preparation will be adapted to all sales departments. A simple case, however, will illustrate the principles that are applicable to the needs of any manufacturing business.

A corporation manufactures a line of goods, all of the same general class, numbering 50 different grades and styles. The product is sold by the company's own organization in every state of the Union. The vice-president in charge of sales is assisted by a general sales manager. The states of the Union are classified into **sales territories** for each of which there is a resident manager who employs the salesmen to call upon the trade.

Each salesman estimates the **quantity of goods** that he will be able to dispose of each month during the forthcoming period at prices established by the

house. As an aid to him in making fair estimates he should be supplied with a statement of the quantities sold in his section of the territory during past months. The estimate should be in terms of quantities for each commodity.

The **salesmen's forecasts** are submitted to their **territorial managers,** who make such revisions as their judgment may dictate. The temperament of the salesman will color his forecast and the manager must not be color-blind. Optimistic forecasts have to be cut down; pessimistic ones may be raised; unbalanced ones need to be adjusted. Each territorial manager prepares a summary of the revised forecasts of his salesmen and forwards it to the general sales manager at the home office. These summaries are in terms of quantities representing the total sales expected from the territory for each month of the budget period.

The forecasts for each territory are reviewed by the **sales manager.** He makes revisions according as experience has taught him to modify up or down the forecasts of his individual subordinates. Other revisions he will make in the light of his knowledge of general business conditions and the limitations prescribed by sales policy, production capacity and financial considerations. The several territorial forecasts are then summarized to show the total expected sales in all territories by months and for the whole period.

The sales forecast is now ready for submission to the other functional heads, each of whom should consider its effect upon his particular department. Are the production facilities of the concern adequate to accomplish the expected deliveries? Can the quantities planned for individual items be produced economically? Can raw materials be purchased to meet the requirements of production? Will the financial resources of the company permit the handling of the expected volume of business? Do the forecasted sales represent goods that will yield the maximum profit? It is not always possible to confine a business to the articles which will yield the greatest profit; frequently certain styles or models must be sold at a loss in order to complete the line and assist in the disposal of the profit-producing goods. Any tendency to stress the low price and low profit goods must be curbed if a fair average profit is to be expected on the entire business.

From the salesman's point of view a sale has been completed when the customer places the order, while those who are responsible for the preparation of the budget are concerned chiefly with **expected shipments.** Some businesses sell goods from accumulated stock; if orders are for immediate delivery, orders secured during a month may be taken for budgetary purposes as equivalent to shipments in that month. In most businesses the volume of orders taken in a month is no measure of the shipments for that month. The forecasts of the salesman will represent expected orders, and whether he should be required to translate orders into deliveries or whether this should be done by his immediate superior or by the general sales manager at the home office is a question for each concern to decide for itself. In any event, before the sales forecast is submitted to the functional heads it should be adjusted to represent shipments.

Up to this point the sales forecast is in terms of quantities. While the application of selling prices and the calculation of sales values for the various preliminary estimates might assist judgment in making revisions, the clerical labor involved is considerable, especially where the estimates are subject to a number of revisions. When the forecast is submitted for the consideration of functional heads, however, **prices and sales values** should be shown, as well as quantities. The preliminary estimates should be readily available for reference, also, to assist those who must now approve or again revise the sales forecast upon which the preparation of other forecasts is largely dependent.

FORMS ILLUSTRATING PRELIMINARY ESTIMATES AND SALES FORECAST.—Two forms illustrated herewith will serve the purposes of the preliminary estimates and the sales forecast as described above. Form in Fig. 1 showing quantities only is for the **preliminary estimates by salesmen** and for the summary by each territorial manager. Information regarding sales made in the same period of the previous year should be entered in the column

PRELIMINARY SALES ESTIMATE

PERIOD FROM ..... 19.. TO ..... 19..

TERRITORY ..... SALESMAN .....

ARTICLES	Quantities Sold in Same Period of Previous Year	QUANTITIES EXPECTED TO BE SOLD			COMMENTS
		Original Estimate by	Revisions by	by	
TOTALS					

FIG. 1. Preliminary Sales Estimate Made by each Salesman

provided for that purpose before the forms are distributed to the salesmen. The form in Fig. 2 is intended for the forecast of both quantities and values. Details for each territory may or may not be entered on this form; if useful, the data should be shown. A separate sheet should be used for each month and a summary should be prepared to show the total anticipated sales for the entire budget period. When completed, all the details of the forecast, including

SALES FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

ARTICLES	SALES MADE IN SAME PERIOD OF PREVIOUS YEAR			PRELIMINARY ESTIMATE OF ANTICIPATED SALES			FORECAST FINALLY ADOPTED			ACTUAL SALES		
	Quantities	Avge. Price	Amount	Quantities	Avge. Price	Amount	Quantities	Avge. Price	Amount	Quantities	Avge. Price	Amount
TOTALS												

FIG. 2. Sales Forecast

the preliminary estimates, should be turned over to the **budget head** to be submitted later with other forecasts to the budget committee. On the form in Fig. 2, the column headed "Actual Sales" is for the later comparison of actual results with the budget.

VARIATIONS IN PROCEDURE.—Special conditions will suggest variations in the above procedure to adapt the method to particular businesses. For example, if the goods sold are of great variety, comprising many different grades and styles, it may be desirable to estimate by classes instead of by individual items; however, estimates may be prepared for individual items of those goods which comprise the bulk or the most significant part of the business and the remainder may be handled by classes. While the exact method to be followed is an important question to be decided eventually, the essential objective in the earlier stages of the introduction of the budget is the formation of the habit of forecasting future business regularly each month by the most obvious method, subject to refinement later.

THE SELLING EXPENSE FORECAST.—The principal object of the selling expense forecast as well as other expense forecasts is control of expenditure. The costs of selling, especially advertising, may be regulated about as the policy of the house is disposed to dictate. The increase or decrease of these expenses may have immediate effect upon the volume of business. But the response to redoubled sales effort cannot be predicted with certainty; on the other hand, retrenchment in advertising has cost some concerns far more in loss of trade than the apparent saving in expense.

While the kinds of expense that for various purposes should be classed as applicable to selling may be subject to differences of opinion, for the purposes of the budget the matter is clear. Selling expenses should include all expenditures under the control of the chief sales executive or his subordinates. The **principal items** for a manufacturing business are as follows:

Salaries of sales executives (not including officers or partners unless their efforts are devoted exclusively to sales).
Salaries of salesmen.
Salaries of clerks and stenographers at branch sales offices and in the sales department of the home office.
Commissions.
Traveling expenses of salesmen and others on business connected with sales.
Entertainment of customers.
Dues of clubs and associations in which membership is maintained for the benefit of sales.
Local advertising.
National advertising.

PREPARATION OF ESTIMATES.—**Original estimates** should be prepared by the territorial managers, covering expenses over which they have control. These estimates may be made for the entire budget period instead of for each month unless there is fluctuation, as between months, in amounts to be expended.

The general sales manager at the home office will prepare similar estimates covering salaries to be paid to territorial managers and expenses of the sales department of the home office.

The estimates will be considered and possibly revised by the general sales manager and the vice president in charge of sales. **Summaries** should then be prepared to show the total expense of each territory for all months of the budget period and the total for all territories, including the home office.

SELLING EXPENSE FORECAST

TERRITORY ..... PERIOD FROM ..... 19.. TO ..... 19..

ITEMS	Expenditures for Same Period Previous Year	ANTICIPATED EXPENDITURES				ACTUAL EXPENDITURES	COMMENTS
		Estimated by	Revised by	Revised by	As Finally Adopted		
TOTALS							

FIG. 3. Selling Expense Forecast

The form in Fig. 3 is designed to serve all the purposes of the original estimates, subsequent revisions and summaries. The names of the different expenses should be shown on the original territorial estimates under the heading "Items," and when necessary or helpful these should be supported by details; for example, the item "salesmen's salaries" may be supported by a statement showing the name and the amount to be paid to each salesman.

All **advertising expenses** should be covered by an appropriation of a certain sum of money to carry on a definite campaign. The process of allocating the appropriation to the various mediums of advertising will fix the amount of expense to be incurred in each month.

THE PRODUCTION FORECAST.—The executive in charge of manufacturing is responsible for the preparation of the production forecast. His forecast necessarily will be delimited by the sales policy laid down by the budget committee or board of directors.

If it appears that the **maximum output** for the budget period cannot be sold at regular prices, consideration may be given to a **reduction in prices** as a means of keeping the factory running, and to whether this move would result in a smaller loss of profit than would be suffered with a partially idle plant. Reduced prices with consequent greater sale of the product might be effected by an improvement in equipment and by more economical methods of manufacture. These remedies failing, it may be necessary to lay plans for a reduction in the schedule of operation and in overhead expense. On the other hand, an anticipated volume of business in excess of the factory's capacity may indicate the possibility of increasing the selling price or reducing the sales force. If the increased business appears likely to be long-sustained, plans may be perfected for the installation of improved or additional equipment to increase output. It is far better to push production of present equipment to the highest possible point, resorting to overtime operation if necessary, than to invest large sums in plant and equipment which later may lie idle.

GOODS ON ORDER AND FOR STOCK.—Goods are made for stock in anticipation of sales orders, or manufacture may wait upon the receipt of sales orders. Buyers of the former class of goods are accustomed to immediate deliveries. To hold their business, an inventory of finished goods must be carried to meet the demand for prompt shipments. Others expect to await manufacture because no earlier delivery of the particular goods can be secured under the custom of the trade. Most concerns carry stocks of certain commodities and produce others only to order.

When in the nature of the business a stock of finished goods has to be maintained, the quantities shown by the sales forecast (representing deliveries) should be reduced by the goods on hand at the beginning of the budget period and increased by those expected to remain on hand at the end, in order to arrive at quantities to be produced.

The problem in the control of goods manufactured for stock is to maintain a minimum inventory that shall still be adequate to satisfy promptly the demands of the trade. Essential to this control is the setting of minimum and maximum quantities to carry in stock, and standard quantities to order into the factory, and keeping a perpetual inventory record of finished goods as on the form in Fig. 4.

The **minimum stock** is the smallest quantity which experience indicates will supply the trade while a new lot is being processed. The **standard quantity** to order into the factory will not be smaller than can be processed economically nor larger than can be sold in a reasonable length of time. The chief object is

PERPETUAL INVENTORY FINISHED GOODS

ITEM..... SPECIFICATION NUMBER..... MINIMUM STOCK.....

MAXIMUM STOCK..... STANDARD QUANTITY TO ORDER INTO FACTORY.....

ORDERED INTO FACTORY			RECEIVED FROM FACTORY			DELIVERED TO CUSTOMERS		Balance on Hand	Unfilled Orders	Unsold or Shortage
Date	Quantity	Order Number	Date	Quantity	Order Number	Date	Quantity			

FIG. 4. Perpetual Inventory Record of Finished Goods

to hold the investment in finished goods to as low a volume as will be consistent with economical manufacture and satisfaction of customers. The **maximum stock** is the sum of the minimum stock and the standard quantity to order into the factory.

The Unfilled Orders column in the perpetual inventory record (Fig. 4) shows the portion of the balance on hand applicable to **orders not yet shipped.** A

PRODUCTION FORECAST

Period From ..... 19.. To ..... 19..

Items	Specification Number	Unit	Requirements of Sales Forecast (a)	Estimated Finished Goods Inventories		Anticipated Production (a+b−c)	Actual Production
				Close of Period (b)	Beginning of Period (c)		

Fig. 5. Production Forecast in Quantities

large figure in that column may indicate that a new lot of more than the standard quantity should be started into work before the minimum stock shall have been reached.

A **seasonal business** necessitates the manufacture and accumulation of goods during the period of low sales. The plan of inventory control described is flexible: the range between minimum and maximum stocks may be lengthened or shortened and the standards may be varied according to season.

When production is strictly to order, the anticipated deliveries to customers constitute the production program without adjustments for inventories of fin-

PRODUCTION FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

ITEMS	Specification Number	Unit	Requirements of Sales Forecast (a)	ESTIMATED INVENTORY		ANTICIPATED PRODUCTION (a + b − c)	AVERAGE PER MONTH	ACTUAL PRODUCTION						
				Close of Period (b)	Beginning of Period (c)			Jan.	Feb.	March	Apr.	May	June	Total

FIG. 6. Form of Production Forecast Providing for Monthly Comparison

ished goods. Few concerns, however, avoid altogether the accumulation of goods returned for one reason or another, **overruns,** and goods made in periods of depression without sales orders. Such inventories should be considered in the preparation of the sales forecast and the complementary **production forecast.**

The form in Fig. 5 is intended for presentation of the production forecast in terms of quantities. It should be prepared for each month with a summary to show the total estimated output for the entire budget period. If production is planned to be constant from month to month, the form in Fig. 6 can be used to advantage. This form provides for monthly comparison of actual output with the monthly average of anticipated production.

THE PLANT AND EQUIPMENT FORECAST.—Expenditures for plant and equipment are classified as follows:

1. Replacements of worn-out or obsolete units.
2. Extraordinary repairs that are in the nature of partial rather than complete replacements of specific units.
3. Additions to plant and equipment to increase productive capacity, to effect better balance as between operations, or to raise the quality of the output.
4. Ordinary repairs incidental to operation, which may be defined as those which neither materially add to the value of the property nor appreciably prolong its life, but keep it in an ordinarily efficient operating condition.

Ordinary repairs are dealt with under the head of Manufacturing Expense Forecast (page 274).

Outlays for Replacements and Repairs.—Replacements and extraordinary repairs ordinarily maintain the plant at efficient productive capacity if not postponed unduly. They cannot be too long deferred without threatening serious breakdowns in the continuity of production. For this reason it may be sound policy to authorize outlays for replacements even in the face of an impending period of part-time production, provided the outlays can be financed. A heavy production schedule, however, will very likely entail special and possibly large outlays for replacements. Substantial increase in production may be possible only by replacements of obsolescent equipment with improved units. The estimate of anticipated expenditures for replacements, therefore, will depend in great measure upon the production program.

Expenditures for Plant and Equipment.—Additions to plant and equipment should not be authorized until there has been a searching review of the estimated cost of the projects, the plans for financing the cost and the expected profits to be earned. An enterprising management that is continually developing new business will not lag in erecting new buildings and installing machinery to enlarge the facilities of production. It is not an object of the budget to repress business enterprise. No scheme of budgetary control should be administered in such a way as to imprison mechanical invention and marketing genius. At the same time there ought to be a predetermined plan for lifting the financial burdens of extensive projects of construction. And the program of financing additions to plant and equipment cannot be considered apart from all the other financial transactions as estimated for the same period.

The **proposals for additions** to plant and equipment should be in writing and as detailed in specifications as indicated by the following list of data:

1. Description of project in engineering terms.
2. Need of the facilities, benefits to be derived therefrom, etc.

3. Estimated cost.
4. Loss on assets to be discarded, if any.
5. Alternatives and their cost.
6. Additional expense expected as a result of the increased investment in fixed assets.
7. Estimated net savings in operating cost.
8. Plan for defraying cost out of earnings or capital.

The budget committee should weigh the anticipated benefits as against the expected additional expense and make its decision accordingly. Those expenditures which are approved will form the basis of the forecast.

Form for Plant and Equipment Forecast.—A form for presentation of the completed forecast is illustrated in Fig. 7. A separate sheet may be used for each month with a **summary** representing the total anticipated expenditures for the budget period or, if no great number of plant transactions are contemplated, the anticipated expenditures over the whole period may be set up on one sheet provided with columns for monthly entries of actual expenditures similar to the form in Fig. 6.

The amounts of money to be entered as anticipated expenditures should be those which it is expected the company will have to pay or will become liable for in each month; for example, the expected placing of an order for new equipment in January to be received in February would call for entry on the February forecast.

Other anticipated expenditures in the fixed asset class, such as furniture and fixtures, water rights, patents, copyrights, trade-names, etc., will be dealt with in a similar manner, the forecast being prepared under the supervision of the executive in charge.

THE PURCHASING FORECAST.—The principal object of the purchasing forecast is the definition of a purchasing program that will maintain stocks on hand at the lowest level consistent with prompt deliveries to the factory. The head of purchasing, who is responsible for the preparation of this forecast, bases his estimates on the requirements of the production schedule.

The quantities of materials and supplies in the production schedule must be modified to allow for stocks already on hand at the beginning of the budget period and for stocks to remain on hand at the end of the period. The usual practice for the regulation of purchases is to direct all buying to the maintenance of stocks on hand at a proper level. Theoretically, the proper level might be the smallest quantity of each commodity that would supply the demands of production during the time required for the placing of an order and the receipt of a new lot. However, it is impossible to keep the stock on hand always at the exact level which theoretically might serve all purposes to the best advantage; moreover, the economical quantity to purchase must have consideration. The customary practice is to establish minimum and maximum quantities to be kept on hand and a standard quantity to purchase.

The **minimum** is the smallest quantity that will supply the demands of the production department during the time necessary for the purchase and receipt of a new lot. Since unavoidable delays in the receipt of purchased materials are likely to occur, the minimum should be high enough to guard against them. As soon as the minimum stock of a commodity is reached, an order for the purchase of a new lot should be placed at once.

The **standard quantity** to order should be fixed with consideration of the economical quantity to purchase; but in order to avoid unnecessary employment of capital and to guard against deterioration, obsolescence and decline in market

PLANT AND EQUIPMENT FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

	ANTICIPATED EXPENDITURE						ACTUAL EXPENDITURE	
	Original Estimate by.....		Revision by		Finally Adopted			
Replacements								
Total replacements								
Additions								
Total additions								
Extraordinary Repairs								
Total extraordinary repairs								

FIG. 7. Forecast of Plant and Equipment Expenditures

values, it should not be more than will supply the requirements of the factory for a reasonable length of time. Experience and good judgment must be brought to bear upon the problem, and the standards should be changed from time to time to accord with changing conditions or until it is believed that they represent the best quantities to purchase in view of all the limitations.

The **maximum stock** will be the sum of the minimum stock and the standard quantity to order.

The regulation of purchases as described above contemplates buying for current needs only, but it does not inhibit the purchase of larger quantities if that should appear to be warranted by market conditions. The price advantage to be gained, however, must be substantial to offset the disadvantage of tying up excessive amounts of capital over any considerable length of time. **Speculation in raw materials** should not be indulged in except with the sanction of the board of directors.

FORM FOR PERPETUAL INVENTORY OF RAW MATERIALS.—Information must be readily available relative to the quantities on hand of each item. A record similar to that illustrated in Fig. 8 will meet the requirements in most cases.

The Balance on Hand column shows the position relative to the minimum or maximum stock. The function of the Applied column is to show the portion of the balance applicable to factory orders on hand even though the materials may not have been requisitioned out of stock. This constitutes an additional safeguard against lack of materials, when needed, and may indicate the necessity of placing a new order, possibly of more than the standard quantity, before the minimum stock is reached. Information as to application of materials to factory orders should come from the planning department.

FORM FOR PURCHASING FORECAST.—The purchasing forecast will be presented on a form similar to that shown in Fig. 9. If materials shrink in process, the quantities shown in the Work in Process inventory columns should represent as near as possible the equivalents in the raw state. In many enterprises quantities in process are fairly constant, and they may, therefore, be ignored in the preparation of the purchasing forecast, except possibly in periods of restricted operation or of greater than normal activity when they are likely to vary materially as between the beginning and end of a period. When the equipment is not balanced, due allowance must be made for accumulation of partly finished materials at various points in the process.

A separate purchasing forecast should be prepared for those supplies which are treated in the accounts as manufacturing expense or factory overhead.

In order to provide a means for **monthly comparison** of actual purchases with anticipated purchases and to furnish data for the compilation of the financial forecast, the purchasing forecast should be prepared for each month as well as for the whole budget period.

THE DIRECT LABOR FORECAST.—The production program having already been decided upon and the operating schedule determined, the amount which must be paid for direct labor in each department of the factory should be estimated accordingly with due regard for expected increases or decreases in the wage schedule.

Indirect labor represents amounts paid to employees whose efforts are essential to continuous production but who do not themselves actually engage in the fabrication, operation of productive machines, assembling or otherwise making ready the product for market; for example, superintendents, foremen, designers or draughtsmen, repair men, engineers, firemen, watchmen, etc. The

PERPETUAL INVENTORY—RAW MATERIALS

COMMODITY.....SPECIFICATION NO.....UNIT.....MIN. STOCK.....
STANDARD QUANTITY QUANTITY USED
MAX. STOCK.....TO ORDER.....PRIOR YEARS.....

ORDERED				RECEIVED		ISSUED			Balance on Hand	APPLIED		Available or Shortage
Date	Quantity	Ord. No.	Price	Date	Quantity	Date	Quantity	Ord. No.		Quantity	Ord. No.	

FIG. 8. Perpetual Inventory Record of Raw Materials

PURCHASING FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

COMMODITIES	Specification No.	Unit	Production Forecast Requirements (Quantities) (a)	ESTIMATED INVENTORY AT CLOSE OF PERIOD (QUANTITIES)			INVENTORY AT BEGINNING OF PERIOD (QUANTITIES)			ANTICIPATED PURCHASES			ACTUAL PURCHASES		
				Raw Materials	Work in Process	Total (b)	Raw Materials	Work in Process	Total (c)	Quantities (a+b−c)	Estimated Prices	Estimated Amount	Quantities	Prices	Amount
TOTALS															

FIG. 9. Purchasing Forecast

amounts paid for such services ordinarily cannot be reduced in direct proportion to a restricted schedule of operation. Usually they are regarded as manufacturing expense and will be treated as such in the budget procedure described herein.

The direct labor forecast should be prepared under the supervision of the production executive with the aid of the planning and cost departments. The planning department will be in possession of information relative to capacity of machines in various departments and will predetermine the number of units to be operated and the number of operatives necessary in order to fulfil the production program. The cost department will furnish labor costs per unit of output for each department or each operation. With these data as a basis, the anticipated total amounts to be paid for direct labor are estimated.

DIRECT LABOR FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

DEPARTMENT	Class of Operative	Number of Operatives	Man-Hours	Rate per Hour	Anticipated Amounts	Actual Amounts

FIG. 10. Direct Labor Forecast

Fig. 10 shows a convenient means of presenting the direct labor forecast for consideration of budget committee. This is designed for the preparation of a separate forecast for each month with a summary showing the total for the entire budget period. The anticipated expenditure for labor during the budget period may vary little as between months; in that event the forecast for the entire budget period could be prepared on a single sheet showing the amounts expected to be paid for the whole period and the average per month with columns for the entry of actual expenditures of each month similar to the method illustrated in Fig. 6. The plan contemplated here, however, calls for monthly comparisons of actual with estimated results and for this purpose, as will be explained later, a separate forecast should be prepared for each month with a summary showing the total for the budget period.

THE MANUFACTURING EXPENSE FORECAST.—These expenses constitute that element of manufacturing cost commonly referred to as factory overhead expense, overhead burden, or simply burden. The kind of expenses which, in accordance with general practice, should be included with this group are indicated in the following table:

Works manager	Purchased power
Plant engineer	Manufacturing supplies
Superintendents and foremen	Incidental repair supplies
Designers and draughtsmen	Fuel
Incidental repair labor	Small tools
Watchmen	Depreciation
Engineers and firemen	Insurance
Factory clerks	Real estate and personal property taxes
Other indirect labor	

Relative Fixity of Overhead Expense.—Some of these expenses are affected to a greater or lesser degree by the schedule of operations; that is to say, they may be reduced somewhat as the operation of the plant is restricted below normal, but ordinarily they cannot be brought down in direct proportion to the reduction in output. Some of them can be reduced but little and would still have to be met if the plant should be wholly idle. Conversely, as production is increased toward capacity, an increase in many of the manufacturing expenses may be looked for but not in proportion to the increase in output. For example, the amounts paid to the works manager and the plant engineer, mentioned in the foregoing list of typical manufacturing expenses, would remain stationary under changing conditions of operation unless the salaries of the executives should be raised or lowered; superintendents and foremen, in most cases, could not be substantially reduced unless entire departments could be shut down; watchmen must be employed whether the plant is running or is wholly idle, and the force of engineers and firemen would be increased or could be reduced to any material degree only through the starting up or shutting down of complete power units. Minor repairs incidental to the operation of the plant, which do not appreciably prolong the useful life of the assets nor materially add to their value (see page 267), should be treated as an expense of manufacture. A definite relation will usually be found to exist between the amounts expended for repairs of this nature and the percentage of capacity at which the plant is operated.

Similarly other items of overhead expense may be affected in varying degree by changes in the operating schedule. The forecast of those expenses which represent wages paid to various employees will be definitely affected by a contemplated increase or decrease in the wage scale.

Relation of Overhead Expense to Cash Outlays.—All of the manufacturing expenses so far described represent cash outlay or increase of accounts payable within the budget period. There are other items which are properly classified as manufacturing expense but which do not represent cash outlay. The amounts chargeable to operations for manufacturing or expense supplies, for example, represent consumption of supplies while the cash outlay would be directed to the maintenance of a sufficient stock on hand. This might be said also in relation to small tools, except that many concerns carry in their accounts a fixed sum to represent small tools and write off purchases as expense. However, assuming that stocks on hand or inventories of supplies, small tools and the like are properly accounted for and that only the value consumed is considered as manufacturing expense, the purchase of these items should be handled in

MANUFACTURING EXPENSE FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

KIND OF EXPENSE	Same Period Previous Year	ANTICIPATED EXPENSES				ACTUAL EXPENSES	
		First Estimate By		Revision By		Finally Adopted	
Works manager							
Plant engineer							
Superintendents and foremen							
Designers and draughtsmen							
Incidental repairs (labor)							
Watchmen							
Engineers and firemen							
Factory clerks							
Other indirect labor							
Purchased power							
Manufacturing supplies							
Incidental repairs (supplies)							
Fuel							
Small tools							
Depreciation							
Insurance							
Real estate and personal property taxes							
TOTAL							

FIG. 11. Manufacturing Expense Forecast

the budget procedure in a manner similar to that described for purchases of raw materials and supplies (see page 268).

The **allowance for depreciation** calls for no cash outlay, but the gradual decline in value of plant and equipment through use in the production of goods must be considered an item of manufacturing expense in any sound budgeting or accounting plan. Consideration should be given to increasing the regular depreciation allowance for anticipated overtime operation. Depreciation possibly may be decreased for operation of less than the normal hours per week but it should be remembered that a considerable part of the decline in value is due to other causes than wear and tear and continues whether or not the plant is in operation.

Insurance is usually paid for once a year or once in three years. The amount to be set up in the manufacturing expense forecast for the budget period or any portion of it is the proportionate part of the annual premium for that period. Likewise **real estate and personal property taxes** should be computed for the budget period in proportion to the annual payment.

Form for Manufacturing Expense Forecast.—Manufacturing expense being a part of the cost of the output, the forecast should be prepared under the supervision of the production head; however, the accounting department or the cost division of that department will be called upon for information relative to expenses of past periods and may well be called upon to prepare the first draft of the forecast.

The manufacturing expense forecast will be submitted on the form in Fig. 11 separately for each month, with a summary showing the totals for the entire budget period in accordance with the general plan outlined in this article. If from the nature of the business there is little variation in the various expenses from month to month, it may be possible to dispense with the monthly forecast; however, the average monthly expenses, based on the totals for the budget period, should be shown as a **standard for comparison** with the actual monthly expenses in a manner similar to that suggested for the production forecast (Fig. 6).

It may be well to reiterate that it is consumption of **supplies, fuel, small tools** and other items for which inventories may be carried in the accounts, that should be considered in the manufacturing expense forecast. The amounts of money will be derived by estimating the cost of the quantities which will appear on the supplies purchasing forecast [column (a) in Fig. 9], which, as already mentioned, should be prepared separately from the forecast for the purchase of raw materials.

THE ADMINISTRATIVE EXPENSE FORECAST.—The kinds of expenses which should be considered under this head are indicated below:

Salaries of officers
Other administrative and executive salaries
Traveling expenses of officers and executives
Salaries of clerks and other office employees
Office supplies and expense
Telephone and telegraph
Postage
Rent of office building
Legal services
Auditing
Donations
Taxes (exclusive of personal property and real estate taxes included with

manufacturing expenses and federal income tax which is treated as a separate item)
Depreciation on office furniture and fixtures

The forecast will be prepared by someone delegated by the president or chief executive. In large organizations the administrative function ordinarily will be departmentalized, as for example:

General administrative
Finance
Purchases
Cost accounts
General accounts
Statistics
Personnel

The executive in charge of each department should be required to prepare a separate monthly forecast to be submitted to the president or his assistant for approval or revision. A summary should be prepared to show the total expected administrative expense of all departments and an additional summary to show the total for the budget period.

A form similar to that illustrated in Fig. 11 will be suitable for the forecast of administrative expenses. Here again if there is little or no variation in the various anticipated expenses from month to month, it may be possible to dispense with the monthly forecasts, showing only the total amounts for the budget period and a monthly average as suggested for the production forecast (Fig. 6) for comparison with the actual monthly expenditures.

THE OTHER INCOME FORECAST.—Every business has miscellaneous items of income which arise from sources other than sales of its regular product, for example: interest and dividends on securities owned, interest received from bank deposits and other sources, cash discounts gained (if not classed as a deduction from purchase costs) and profits from the sale of securities and fixed assets.

The treasurer or chief accountant is in the best position to prepare the other income forecast. The form in Fig. 11, with some changes in the headings, will be suitable for its presentation. Usually a forecast of other income which covers the entire budget period without consideration of the expected amounts for each month will serve the purpose.

THE OTHER DEDUCTIONS FORECAST.—This is the converse of other income as described above and covers all items of **extraordinary expense or loss** which cannot be classified with the regular expenses of the business. Interest on borrowed money, losses from bad debts and from the sale of securities and capital assets usually are treated in this classification. Sometimes cash discounts allowed on accounts receivable are included.

THE FINANCIAL FORECAST.—The financial forecast deals with cash receipts and expenditures, loans and repayments, issues and redemptions of bonds and capital stock. The purpose of the financial forecast is to show the financial requirements of the anticipated operations. This forecast when finally determined upon becomes the foundation of any plan for financing additional capital. Completion of the financial forecast may show that the contemplated operations as first planned are beyond the company's present ability to finance and must, therefore, be curtailed.

Cash Receipts.—The main source of cash receipts for a manufacturing business is collection of accounts and notes receivable. Collection of slow accounts should be given special consideration apart from the accounts that may be expected to be collected when due.

Expected sales as shown on the form in Fig. 1 represent amounts which it is

anticipated will be invoiced to customers each month. The problem here is to estimate when collections may be expected for each month's invoicing. Ordinarily a portion will be paid in the month billed and the balance spread over two, three or more months thereafter, depending upon the terms on which the goods are sold. By analysis of the collections of past months, percentages may be set up representing the average portions of a month's billing that have been paid during the same month and in each month thereafter. These percentages, applied to the expected sales of each month of the budget period, will serve to indicate the amounts of cash receipts for each month to be expected from the anticipated sales.

Due dates of notes receivable, of course, indicate in which months payments may be expected, unless renewals are anticipated.

Other anticipated cash receipts will be found in the other income forecast. However, some of these items, especially interest from securities, may represent accrued income not yet received in cash and should be assigned to the months in which the cash will be collected.

Cash Disbursements.—Disbursements will be made principally in payment of accounts and notes payable, payrolls, selling and administrative expenses, interest, funded indebtedness coming due, federal income tax and dividends.

At the beginning of a budget period there will be outstanding **accounts payable** which must be assigned to specific months of the budget period in which payment will be made. Additional accounts payable will arise from the purchasing forecast, but these amounts are those which it is expected will be invoiced in each month of the budget period, and it will be necessary for purposes of the financial forecast to assign these anticipated invoices to the specific months in which they will be paid in accordance with the terms of purchase. Other accounts payable will result from contemplated purchases of advertising space in newspapers and magazines and the like which may not be included in the purchasing forecast.

Disbursements in payment of any **notes payable** falling due within the period should be allotted to the proper months.

Anticipated **wages** will be indicated by the direct labor forecast, but here again the amounts shown for each month will be those which it is expected will be charged to operation and not those which will be paid during the same month. At the beginning of each period there will be an unpaid liability for payroll that was charged to the operations of the previous month and is to be paid within the budget period.

Another class of disbursements is shown on the manufacturing expense forecast. However, not all of the items of **expense** there shown call for cash disbursement. The illustrated form shows three groups of expenses, of which the first represents indirect labor forming a part of the payroll and subject to treatment similar to that described above for direct labor. The second group represents purchases of supplies which were scheduled on the purchasing forecast. Disbursements for this group will be in payment of accounts payable. The first item of the third group, depreciation, has no place in the financial forecast because it represents no cash outlay. Insurance and real estate and personal property taxes, other items of the third group, usually are paid for annually, but insurance premiums may be paid at longer intervals and the amounts shown will represent the accrued expense while what is required for the financial forecast is the expected cash outlay. This grouping of expenses is illustrative; in practice each item should be considered as to whether there will be cash outlay connected with it, when the disbursement is likely to occur and whether

the expected payment already has been provided for in some other section of the forecast.

What has been said above relative to anticipated disbursements on account of manufacturing expense is generally applicable also to the selling and administrative expense forecasts.

Other expected disbursements will be indicated by the other deductions forecast, but as in all the other forecasts, care must be used to distinguish between an expected accrual of an expense and the cash outlay connected with it.

The **federal income tax** is determinable shortly after the close of the calendar year or fiscal year. The amount to be disbursed in each third month of the following year should be provided for in the financial forecast.

Form of Financial Forecast.—Responsibility for preparation of the financial forecast rests upon the executive in charge of finance, either a vice-president or treasurer. The forecast should be presented for consideration of the budget committee on a form as illustrated in Fig. 12, with supporting details of disbursements on a form illustrated in Fig. 13.

The anticipated cash balance at the beginning of a month plus the expected receipts represent the funds that it is believed will be available during that month. Should these be insufficient to cover the expected disbursements and leave a safe margin of cash on hand, it will be necessary to plan for additional funds if the co-ordinated program of sales and production is to be carried out. It may be possible to go back over the various forecasts and in view of the necessity to plan economies which at first were not thought of. In the event that additional funds cannot be secured, it may be essential, as a last resort, to reduce the expected volume of operations in order to avoid financial embarrassment.

Procedure on Completion of Tentative Financial Forecast.—Throughout the preparation of the various forecasts, each being dependent upon the others, numerous conferences between executives will be in order to effect the requisite co-ordination; but when the financial forecast has been completed or tentatively completed, a formal meeting of the budget committee should be held to consider the plans (as yet only tentative plans) which have been developed and to decide upon final action. Several conferences may be required and the financial and other forecasts may undergo several revisions to adjust the programs of sales, production, expense and finance to the course that is practicable of accomplishment.

It is essential that all of the forecasts be prepared and finally approved by the budget committee well in advance of the beginning of the budget period; otherwise the chief benefit of this method of preliminary planning will be partially lost.

Whatever plan is found to be most helpful relative to modification of other parts of the budget as the period advances and new facts become known, the financial forecast should be revised directly after the close of each month. Each monthly revision should be for at least a six-months period in advance, that is, the month just past should be dropped from the forecast and estimates of receipts and expenditures inserted for a new month at the end of the six-months period. Forecasts for the intervening months should be changed in the light of new developments which may point to a substantially different financial program.

MODIFICATION OF THE FORECASTS DURING THE PERIOD.—The budget is a detailed plan for future operations, based upon intelligent estimates. It is to be anticipated that the budget must be constantly modified as the

FINANCIAL FORECAST

PERIOD FROM ..... 19.. TO ..... 19..

ITEMS	MONTHS												TOTALS
Cash balance at beginning													
Receipts:													
Accounts receivable:													
Outstanding at beginning													
Anticipated sales during period													
Notes receivable:													
Outstanding at beginning													
Anticipated acquirements													
Other income:													
Interest on bank deposits													
Interest and dividends on securities													
Interest from other sources													
Miscellaneous													
Sales of securities													
Sales of capital assets													
Loans on notes payable													
Bond issue													
New issue of capital stock													
Total receipts													
Total opening balance and receipts													
Disbursements—details attached													
Cash balance at end													

FIG. 12. Financial Forecast

DETAIL OF ANTICIPATED DISBURSEMENTS

PERIOD FROM ..... 19.. TO ..... 19..

ITEMS	MONTHS												TOTALS
ACCOUNTS PAYABLE:													
Outstanding at beginning													
Anticipated purchases of raw materials and supplies													
Additions to plant and equipment													
Advertising													
Purchases, treated as manufacturing expense (see 2nd group, Manufacturing Expense Forecast, page 275)													
NOTES PAYABLE:													
Outstanding at beginning													
Anticipated loans during period													
ACCRUED LIABILITIES:													
Direct labor													
Wages and salaries, treated as manufacturing expense (see 1st group, Manufacturing Expense Forecast, page 275)													
Insurance and taxes (treated as manufacturing expense)													
Selling expenses (exclusive of advertising)													
Salaries (treated as administrative expense)													
Interest on notes payable													
Interest on bonds													
Other interest													
FEDERAL INCOME TAX													
DIVIDENDS													
TOTALS													

FIG. 13. Detail of Anticipated Disbursements

business of the period develops and new facts are faced. It would be folly, for example, to adhere blindly to capacity production as forecast in the budget when it becomes apparent that the output cannot be sold within a reasonable time. With substantially larger sales in sight than originally were believed possible, production and other dependent forecasts should be adjusted accordingly for the balance of the budget period.

As previously mentioned, good results have been attained through monthly revision of the entire budget, dropping the month just passed, adding a new month at the end of the period and possibly revising the intervening months. **No standard procedure** can be recommended; only experience with the particular conditions of a business can indicate the most useful plan to follow relative to modification of the forecasts. Some kinds of business require less detailed planning for shorter future periods than others and a short budget of, say, three months without modification might serve every purpose. Others will find it necessary to plan ahead for long future periods with a correspondingly long budget period and frequent modifications.

Some enterprises cannot base their financial program on a single forecast of sales. Sales may be subject to many vagaries of trade that cannot be foreseen. The demand for the company's merchandise may fluctuate widely from year to year with fickle changes in fashion. Under such conditions it is advantageous to prepare three budgets based upon different volumes of sales representing highest, lowest and average estimates. Purchases, labor costs, expenses and financial borrowings are estimated separately for three budgets in co-ordination with the respective estimates of sales. As the season progresses it becomes apparent, from the actual sales, which one of the three budgets is being approached and the program for purchases, production, expenses and financial requirements is shifted accordingly. Without a budget an adjustment in program could not be made so quickly even if the need of adjustment should be sensed at all.

THE ESTIMATED BALANCE SHEET AND PROFIT AND LOSS STATEMENT.—These two statements show the expected financial condition of the company at the close of the budget period and the results of the projected operations. After the budget committee has approved the various forecasts described in the foregoing pages, at least tentatively, the estimated balance sheet and profit and loss statement are prepared by the accounting department.

The starting point is the balance sheet as at the beginning of the budget period. The **work sheet** should have several sets of debit and credit columns as in the form shown in Fig. 14.

The balance sheet as at the beginning of the budget period should be entered in columns (a) and (b). The forecasts are then entered, as if they were actual transactions, in columns (c) and (d). For example, the total anticipated sales for the six-months budget period as shown by the sales forecast will be entered in column (c) as a debit to accounts receivable (account A-5), and in column (d) as a credit to Sales (account G-1). Likewise the total of advertising on the selling expense forecast should be entered in column (c) as a debit to that account (account G-25) with a corresponding credit to a liability account, ordinarily Accounts Payable (account D-1). The remainder of the selling expenses will be debited to account G-30 and credited to Accrued Liabilities (account D-10). The setting up of accrued liabilities serves to charge the period with expenses that belong to it and must not be confused with the anticipated cash payments therefor which are taken care of by the estimated disbursements of the financial forecast (see page 278).

The plant and equipment forecast will be treated in a similar manner, also

WORK SHEET FOR ESTIMATED BALANCE SHEET AND PROFIT AND LOSS STATEMENT

PERIOD FROM ..... 19.. TO ..... 19....

Acct. No.	ACCOUNTS	Balance Sheet as at the Beginning of the Budget Period		Adjustments		Estimated Profit and Loss for the Budget Period		Estimated Balance Sheet as at the End of the Budget Period	
		Dr. (a)	Cr. (b)	Dr. (c)	Cr. (d)	Dr. (e)	Cr. (f)	Dr. (g)	Cr. (h)
	ASSETS								
A–1	Cash								
A–5	Accounts receivable								
A–10	Notes receivable								
A–15	Marketable securities								
	Inventories:								
A–20	Raw materials and supplies								
A–25	Work in process								
A–30	Finished goods								
	Plant:								
B–1	Land and buildings								
B–5	Machinery and equipment								
B–10	Reserve for depreciation								
C–1	Prepaid expenses								
	LIABILITIES AND CAPITAL								
D–1	Accounts payable								
D–5	Notes payable								
D–10	Accrued liabilities								
D–15	Dividends payable								
D–20	Reserve for federal income tax								
E–1	Bonds								
F–1	Capital stock								
F–5	Surplus								
	INCOME AND EXPENSE								
G–1	Sales								
G–5	Cost of sales								
G–10	Purchases—raw materials and supplies								
G–15	Direct labor								
G–20	Manufacturing expense								
	Selling expense:								
G–25	Advertising								
G–30	Other								
G–35	Administrative expense								
G–40	Other income								
G–45	Other expenses								
G–50	Federal income tax								
	Balance of profit and loss to surplus								

FIG. 14. Work Sheet for Estimated Balance Sheet and Profit and Loss Statement

the purchasing forecast, the debits being respectively to plant assets (accounts B-1, etc.) and to Raw Materials and Supplies (account A-20) and the credits to Accounts Payable (account D-1). The credit for the labor forecast will be to Accrued Liabilities while that for the manufacturing expense forecast will be divided as follows:

1st group representing wages and salaries, to Accrued Liabilities.
2nd group to Accounts Payable.
3rd group:
Depreciation to Reserve for Depreciation (account B-10).
Insurance to Prepaid Expenses (account C-1).
Real estate and personal property taxes to Prepaid Expenses (account C-1) for whatever amount may have been included in that account on the opening balance sheet and to Accrued Liabilities for any excess over that amount.

The other forecasts should be treated in a similar manner including the financial forecast, on which total receipts should be debited and total disbursements credited to Cash with corresponding debits and credits to the various accounts indicated in that forecast.

The next step in the preparation of the estimated statements is to make **adjustments for the anticipated inventories** as at the close of the period. The anticipated inventory of raw materials and supplies will be obtained by adding to the value on hand at the beginning that which it is expected will be purchased during the period as shown on the purchasing forecast and deducting therefrom the anticipated cost value of the production requirements also shown on the purchasing forecast.

The **work in process inventory** will be estimated by adding to the corresponding inventory at the beginning of the period the anticipated cost value of production requirements, as mentioned above, together with the total labor and manufacturing expenses expected for the period as shown by the respective forecasts and deducting the estimated cost of the anticipated output. Quantities for the latter will be found in the production forecast and the cost department should be able to predetermine the costs which should, of course, be in line with the anticipated costs of material, labor and manufacturing expense as shown by the forecasts of those items.

Likewise the **finished goods inventory** will be estimated by adding to the value on hand at the beginning of the period the estimated cost of the anticipated output as mentioned above and deducting the estimated cost of sales. Quantities for the latter will be obtained from the sales forecast and, as in the case of work in process, the cost department will be relied upon for the estimated costs.

The inventories as at the close of the period having been estimated, entries should be made in columns (c) and (d) as follows:

Opening inventories:
Dr. Cost of Sales for the total (account G-5)
Cr. Raw Materials and Supplies (account A-20)
Work in Process (account A-25)
Finished Goods (account A-30)

Closing Inventories:
Dr. Raw Materials (account A-20)
Work in Process (account A-25)
Finished Goods (account A-30)
Cr. Cost of Sales for the total (account G-5)

STATEMENT OF ESTIMATED PROFIT AND LOSS

PERIOD FROM ..... 19.. TO ..... 19..

Acct. No.		Actual for Same Period of Previous Year		Anticipated for Current Budget Period		Actual for Current Budget Period	
G-1	Sales (net of returns and allowances)						
G-5	Cost of Sales:						
	Inventory at beginning						
	Purchases raw materials and supplies						
	Direct labor						
	Manufacturing expense (to be detailed on supporting schedule)						
	Less inventory at end						
	Total Cost of Sales						
	Gross Profit						
G-25 & 30	Selling Expense:						
	Salaries of sales executives						
	Salaries of salesmen						
	Salaries of clerks and stenographers						
	Commissions						
	Traveling expenses of salesmen						
	Entertainment of customers						
	Club and association dues						
	Local advertising						
	National advertising						
	Total Selling Expense						
G-35	Administrative Expense:						
	Salaries of officers						
	Other administrative and executive sal.						
	Traveling expense						
	Sal. of clerks and other office employees						
	Office supplies and expense						
	Telephone and telegraph						
	Postage						
	Rent of office building						
	Legal services						
	Auditing						
	Donations						
	Miscellaneous taxes						
	Depreciation on office equipment						
	Total Administrative Expense						
	Total Selling and Adminstrative Exp.						
	Net Profit from Sales						
G-40	Other Income:						
	Income from securities						
	Interest on bank deposits						
	Cash discounts gained						
	Profit from sale of securities						
	Total Other Income						
G-45	Other Expense:						
	Interest on borrowed money						
	Losses from sale of securities						
	Losses from bad debts						
	Total Other Expense						
	Net Profit before providing for Federal Income Tax						
G-50	Reserved for Federal Income Tax						
	Net Profit for the Period						

FIG. 15. Statement of Estimated Profit and Loss

ESTIMATED BALANCE SHEET

As at ..... 19..

Acct. No.	ASSETS	Estimated	Actual	Acct. No.	LIABILITIES	Estimated	Actual
	CURRENT:				CURRENT:		
A-1	Cash			D-1	Accounts payable		
A-5	Accounts receivable			D-5	Notes payable		
A-10	Notes receivable			D-10	Accrued liabilities		
A-15	Marketable securities			D-15	Dividends payable		
	Inventories:			D-20	Reserve for Federal Income Tax		
A-20	Raw materials and supplies				Total Current Liabilities		
A-25	Work in process						
A-30	Finished goods			E-1	BONDS		
	Total Inventories				Total Liabilities		
	Total Current Assets				CAPITAL		
	PLANT:			F-1	CAPITAL STOCK		
B-1	Land and buildings			F-5	SURPLUS:		
B-5	Machinery and equipment				Surplus as at (beginning of period)		
B-10	Less reserve for depreciation				Add:		
	Net Plant Value				Profit for budget period		
C-1	PREPAID EXPENSES				Other adjustments (to be detailed)		
					Total Additions		
					Deduct:		
					Loss for budget period		
					Dividends		
					Other adjustments (to be detailed)		
					Total Deductions		
					Surplus as at (end of period)		
					Total Capital		

FIG. 16. Estimated Balance Sheet

Adjustment of the cost of sales account will be completed by closing into that account the purchases of raw materials and supplies, direct labor and manufacturing expense applicable to the period as indicated below:

Dr. Cost of Sales (account G-5)
Cr. Purchases Raw Materials and Supplies (account G-10)
Direct Labor (account G-15)
Manufacturing Expense (account G-20)

Having made all of the necessary adjustments in columns (c) and (d), it remains to carry out into columns (e) and (f) the adjusted profit and loss items, and into columns (g) and (h) the adjusted assets and liabilities, and to bring over from column (e) or (f) the balance of anticipated profit or loss as an adjustment to surplus.

The profit and loss and balance sheet columns will now exhibit all of the figures necessary for the estimated statements which should be set up in a manner similar to that shown on the forms in Figs. 15 and 16.

OPERATION OF THE BUDGET.—All of the forecasts described in the foregoing pages together with the estimated balance sheet and profit and loss statement constitute the budget. The estimated statements are based upon changes in the actual financial condition at the opening of the budget period and should be completed as soon thereafter as possible. A meeting of the budget committee should then be held for reconsideration of the forecast operations and their probable results as shown by the estimated statements. In other words, the budget in its completed form should now be submitted to the committee and approved, provided, of course, no further revision appears to be necessary.

Immediately upon approval, the budget becomes the program designed to govern the activities of the business. The original will be in the possession of budget department representatives, who will prepare copies for distribution to the functional executives for guidance in the operation of their departments. Ordinarily functional heads will be officers of the corporation, partners of the firm or those who are otherwise entitled to a copy of the complete budget. However, additional copies of particular forecasts will be required for subordinate executives, the object being to place in the hands of every person who is responsible in any degree for the carrying out of the budget programs definite information as to what he is expected to accomplish.

Operation of the Budget by Sales Department.—For example, the functional head in charge of sales may be entitled to a copy of the complete budget while his subordinate, the sales manager, may be given only the sales forecast and the selling expense forecast, from which, in connection with the original preliminary estimates on file in the budget department, he will have prepared quotas of sales for each territorial manager and limits upon the amounts to be expended, without special permission, on salesmen's salaries and expenses. Each territorial manager likewise will set quotas of sales for each salesman under his jurisdiction, arrange his compensation and limit his expenses in accordance with the amounts assigned to be expended for these purposes. He should not be permitted to exceed the total budgeted expenditure for his territory without permission from the home office, and if the amount is considerable, the matter should be referred to the budget committee.

As previously explained, the sales forecast represents deliveries, and unless the nature of the business is such that these correspond closely to orders taken from month to month, the quotas set for salesmen should represent the latter.

A column is provided in the sales and selling expense forecasts, respectively,

for actual sales and actual expenses, and as soon as possible after the close of each month the budget department should issue to the functional head in charge of sales a copy of those forecasts for that month, including those for each territory on which should be entered the actual results. After the first month of the budget period, additional reports should be issued to show the cumulative anticipated and actual results. This information should be transmitted by the general sales manager to the territorial managers with appropriate comments. A considerable discrepancy between actual sales and the forecasts may point to modification upward or downward of the entire budget, and the committee should meet to discuss and act upon this situation. Any considerable excess of expenditures over the budgeted amounts should be investigated and dealt with in accordance with the circumstances.

Operation of the Budget by Production Department.—In a similar manner the production head will be furnished with reports comparing actual output, direct labor expenditure and manufacturing expenses with the forecasts. Output which is less than was anticipated may be due to lack of materials, and steps should be taken by the purchasing head to correct the trouble. If prices stand in the way, a smaller loss of anticipated profit might result by paying more than was originally contemplated than would be suffered through loss of business from late deliveries. Likewise, if labor cannot be secured at wages anticipated, it may be better to meet wage demands and support the selling department with the scheduled output and proper deliveries. Perhaps no condition of business operation can result in greater unmeasured loss than nondelivery of orders taken.

All the factors affecting volume of output should be considered, and if it appears that production cannot be increased, in other words, if the original estimate was too high, immediate steps should be taken to adjust the manufacturing expense and the operations of the other departments; that is to say, the entire budget should be revised to accord with the lower volume of production.

Operation of the Budget by Purchasing Department.—The operation of the budget in the purchasing department will be handled in a manner similar to that described for sales and production. The temptation to buy large quantities when that seems to offer a price advantage is great, but ordinarily should not be indulged to the extent of substantially increasing the quantities budgeted originally, or as later revised, without the approval of the committee. The effect would be to increase inventories and possibly to disturb the existing financing plans.

Information on Actual Performance to Each Department.—Each functional head should be furnished at the close of each month with information relative to the actual performance of his department compared with the budgeted operations. He will pass on to subordinates such portions of that information as in his judgment will be helpful; he will take action to bring the operations of his department into line with the established budget unless the committee decides to modify it in view of conditions that cannot be controlled.

Expense Budgets to be Grouped by Functions.—It is important that the expense budgets be grouped according to the individuals responsible for the expenses; for example, the functional head in charge of **sales** will be responsible for selling expenses. He in turn will hold his general sales manager and the territorial managers accountable for those expenses within their control.

Primary responsibility for manufacturing or **factory overhead** expenses naturally will rest upon the functional production head, and the most effective grouping will depend to a considerable extent upon the manufacturing organi-

zation. Assuming that the operation of the plant is in direct charge of a works manager and that the physical property is in the care of a plant engineer, the expenses under the control of the former might be as follows:

Superintendents and foremen	Other indirect labor
Designers and draughtsmen	Manufacturing supplies
Incidental repair labor	Incidental repair supplies
Factory clerks	Small tools

The works manager will be directly responsible for such items as salaries of superintendents, foremen, designers and draughtsmen, but the other items named above should be broken down so that each superintendent or foreman can be charged with the responsibility for those expenditures which may be under his direct control.

The plant engineer would be accountable for the following:

Watchmen	Purchased power
Engineers and firemen	Fuel

Such items as salaries of works manager and plant engineer will be under the direct control of the functional head in charge of production.

Administrative expenses for a business of moderate size will be under the direct control of one or two of the chief executives, but in a large organization, responsibility for expenditures will rest upon several or perhaps upon a considerable number of principal and subordinate executives and expense classification should be arranged accordingly.

Purpose of Classification of Expense.—From a budget standpoint the object of classifying expenses is to control expenditure and to place responsibility where it belongs. The classifications and groupings arranged for these purposes may conflict with ideas of the cost and general accountants. However, with reasonable co-operation among those concerned, it should be possible in every case to develop one classification and grouping which would serve all purposes.

A well planned budget provides many safeguards against loss not otherwise to be found. It should not stop at mere restrictive measures of safety but ought to point out weak places in the structure which must be fortified in order to yield maximum profits.

SECTION 5

CONTROL OF CURRENT OPERATIONS

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SECTION 5

CONTROL OF CURRENT OPERATIONS

Control of Receipts and Disbursements

IMPORTANCE OF CASH STATEMENTS.—With the rapid improvement in modern business systems has come an unfortunate tendency on the part of business executives to depend almost exclusively on income statements for information regarding profits and losses and determining important policies.

Weekly, monthly or quarterly reports of sales, costs and expenses are relied upon to show favorable or unfavorable trends in business conditions. Such reports should be available and should be used. But in themselves such reports may fail to convey an adequate picture of certain pressing needs, which if not met promptly may lead to disaster. Indeed, favorable operating statements are sometimes responsible for ultimate unfavorable results, which arise from undue expansion not supported by sufficient cash capital. Operating statements, therefore, are insufficient guides unless supplemented by cash statements, and cash statements are of little value unless they are set up in such a form as to coordinate with operating statements.

Like the business budget, the analysis of cash receipts and disbursements has become an essential part of the modern business system.

SCOPE OF SECTION.—Financial planning should have the foremost consideration in the control of receipts and disbursements. The first portion of this section will, therefore, be devoted to outlining a condensed comprehensive financial control for the use of financial executives. If the cash budget and the other forms therein described and shown are used, daily perspectives of the continually changing conditions will be had, thus enabling such modifications to be made in the financial program from time to time as will assure successful financing. The study of these condensed data will develop ideas in management on the part of an interested executive which cannot be obtained by wading through endless detail.

The planning of the current office routine and of the recording of financial transactions, in such manner as to insure the safeguarding of the cash and the correct accounting therefor, is also vital. The second part of this section will therefore indicate methods and records which should have the consideration of the financial manager in planning for the detailed control of the receipts and disbursements.

While a correct balance sheet will show the financial position of a business at the end of the month, the financial manager ought to know from day to day whether this position is improving or otherwise, and if not improving, he should take immediate steps to control the situation. This he will be in position to do if he has daily data (expressed in unit figures representing thousands of dollars) with respect to the items on the balance sheet which are subject to continual or large fluctuations. These are cash receipts and disbursements, bank balances, outstanding drafts, accounts or other receivables, value of shipments or billings therefor, and incoming invoices payable.

Budgets — Month of —

(Thousands of Dollars)

	Entire Month	1st to 10th	1st to 20th
CASH:			
Balances at Beginning	5.367 M	5.367 M	5.367 M
Receipts: Accounts Receivable	5.800	2.000	4.100
Notes Payable			
Miscellaneous	175	75	75
Totals	11.342	7.442	9.542
Payments: Accounts Payable	4.350	1.650	3.500
Notes Payable			
Pay Rolls	850	120	520
Taxes: Sales	415		
City, State & County	100		100
Capital Stock & Franchise	75		75
Income			
Investments	500	500	
Dividends	490	490	
Fixed Asset Contracts	50	50	
Totals	6.830	2.810	4.195
Balances at End	4.512	4.632	5.347
RECEIVABLE LEDGERS:			
Balances at Beginning	2.600 M		
Sales: Current Period	6.080		
Totals	8.680		
Collections	5.800		
Credits	150		
Balances at End	2.730		
	8.680		
ACCOUNTS PAYABLE:			
Balances at Beginning	5.400 M		
Incoming Invoices	3.500		
Totals	8.900		
Less—Payment of Invoices	4.350		
R.M.D.'s & D.M.'s	260		
Balances at End	4.290		
	8.900		
INVENTORIES:			
At Beginning	6.800 M		
Incoming Invoices (90% to Inventories)	3.250		
Totals	10.050		
Less—Material in Sales (73%)	4.438		
Manufacturing Supplies	156		
Balances at End	5.456		
	10.050		

FIG. 1. Monthly Cash Budget and Other Forecasts

Provision is made for subdividing estimates into periods. The classifications of the items and the number of periods may be increased in all of the divisions.

CASH BUDGET.—A simple form of classified **monthly cash budget or forecast,** of the receipts, payments and bank balances is shown in Fig. 1. In cases where an unusual volume of the disbursements are made on fixed days, such as on the 10th, 15th, 20th, or 25th proximo, the budget might well be divided, by using columns so as to show the expected receipts and payments

from the first of the month to each of those dates, as well as for the entire month.

The budget classifications should show all the larger items of expected receipts and payments such as accounts receivable, cash sales, borrowed money to be received and repaid, accounts payable, pay rolls, notes payable, taxes, dividends, etc. This will enable comparison to be made several times a month between this budget and the actual receipts or payments to date as shown by the various cash receipt and payment books if the comparison is desired in detail, or with the daily cash receipt and disbursement controls if totals only are desired.

Data as to shipments will necessarily have to be furnished by the sales department. The advertising and purchasing departments will have to furnish data respecting advertising expenditures and incoming purchase invoices respectively. The factory accounting department can furnish forecasts as to pay rolls required for a given shipping schedule. A good check upon the reasonableness of the more important figures used in the cash budget is to also budget the receivables, payables and inventories in a condensed manner (also shown in Fig. 1).

DAILY CASH RECEIPT CONTROLS.—Cumulative and comparative reports should be kept for each of the major items of receipt and disbursement. Fig. 2 shows a form covering receipts from sight drafts and open accounts receivable. These reports should provide for the days from 1 to 31 to be arranged vertically along the left side of the page and columns to the right for the insertion of the total daily receipts. Subtotals should be shown covering the receipts to date at the close of every subsequent 5th day of the month. At these 5-day periods it will also be helpful to show in different colored ink the total average daily receipts during the period, for regularly each month there are periods of low as well as of high average daily collections. This makes it possible to compare actual current receipts with those included in the cash budget, at least five times before the end of the month.

DAILY CASH DISBURSEMENT CONTROL.—The form of this control should be similar to the daily cash receipt control. The amounts recorded on this control will fluctuate greatly if the company is in the habit of making payments for previous months' purchases on one or more definite days of the subsequent month. Nevertheless, this form is helpful in enabling one to compare the actual with the estimated expenditures for the month to the close of the 5-day periods.

SPECIAL CONSIDERATIONS.—On both the daily cash receipt and disbursement controls the unusual items of borrowed money incoming and outgoing, and dividends, should not be included in the daily totals or in the 5-day subtotals, but should be shown separately in red or green ink, as their inclusion will reduce the value of these controls for comparative purposes from month to month.

DAILY BANK BALANCE CONTROL.—This may be ruled in form similar to the previously mentioned controls, and will show the comparative daily balances. It will be helpful to compare the fluctuations in the balances from month to month on similar days, while surveying the daily cash controls. By such surveys the manager will see the necessity for pushing collections or arranging financing to take care of coming obligations shown by the periodized monthly cash budget.

RECEIVABLE CONTROLS.—Controls for drafts or accounts receivable may be in form similar to that of the daily bank balance control, and should

show the aggregate outstanding drafts or accounts receivable. Some industries are on a sight draft selling basis. In such cases a daily "outstanding

RECEIPTS FROM SIGHT DRAFTS AND OPEN ACCOUNTS
July to December 1924
(Figures Represent Thousands of Dollars)

SIGHT DRAFTS						Days	OPEN ACCOUNTS					
July	Aug.	Sept.	Oct.	Nov.	Dec.		July	Aug.	Sept.	Oct.	Nov.	Dec.
S	291					1	S	84				
586	326					2	101	63				
189	354					3	89	71				
H	331					4	H	100				
641	S					5	60	S				
1416	1302					To Date	250	318				
472	325					Average	83	79				
270	699					6	73	92				
556	166					7	81	94				
S	450					8	S	61				
612	390					9	69	79				
188	154					10	61	67				
3042	3161					To Date	534	711				
434	351					Average	76	79				
448	585					11	80	97				
S	528					29	S	54				
535	398					30	96	73				
376	443					31	78	88				
10609	10666					Totals	2400	2894				
25	27					Coll. Days	25	27				
424	395					Average	96	107				

FIG. 2. Cumulative and Comparative Daily Report of Two Classes of Separately Controlled Receipts

NOTE: The "To date" figures should be in green or purple. The "Averages" are those for actual number of collection days only and should be in red. "H" means Holiday; "S" means Sunday. The method of dividing the month into periods of 5 days each will be found helpful in preparing cash budgets.

drafts control" is of help to the financial manager. Any let down in collections or any slowing up in unloading of cars by customers is speedily reflected in the increasing outstanding drafts.

In all industries this control must naturally be based upon figures which take into account the daily billings against customers and payments by them; the principle, however, remains the same, with respect to showing the total outstanding receivables at the close of each day.

A separate columnar working sheet should be kept showing on a line for each day, the total receivables at the beginning, the adding machine total of all outgoing invoices, the collections from customers and credit memos, and the outstandings at the end. The last mentioned figure is the only one used on the receivables control. If the condensed daily financial report is kept, to which reference is hereinafter made, this working sheet for receivables will be unnecessary.

SHIPMENT CONTROL.—This control is similar in form to that of the daily cash receipt controls, with totals of the month's shipments shown to

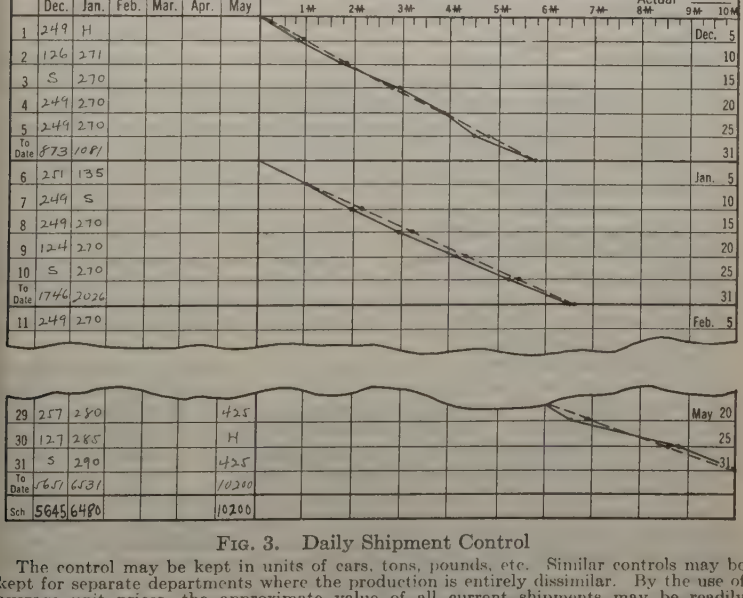


FIG. 3. Daily Shipment Control

The control may be kept in units of cars, tons, pounds, etc. Similar controls may be kept for separate departments where the production is entirely dissimilar. By the use of average unit prices, the approximate value of all current shipments may be readily ascertained.

NOTE: "To date" figures should be in green or purple. "H" means Holiday; "S" means Sunday.

the end of every 5th day. In cases where units can be used, such as cars, tons, pounds, etc., they may be preferable to using the value of the shipments. In other cases, the value of the daily billings against customers may be used. In some cases graphs may be shown on the same block paper and ruled lines

of different colors be used to provide a quick comparison between the estimated shipments used in preparing the cash budget and the actual shipments during every 5-day period. Fig. 3 is a simple form of such control.

It will be helpful to managers to often compare this daily shipment control with the next described Daily Incoming Invoice Control, for the incoming invoices should be immediately cut down, and deliveries on purchase orders rescheduled if shipments are decreasing without reasonable prospect of recovery within a short period.

DAILY INCOMING INVOICE CONTROL.—This control is in the same form as that of the daily shipments, and shows the total of the daily incoming invoices of all kinds, which should be gathered together and totaled on an adding machine immediately after the mail has been opened. It will show the liability for incoming invoices as it accrues.

In sudden changes in the industrial situation it is possible to avoid embarrassment and excessive borrowings by an intelligent readjustment of the incoming material situation by working every day from this control, and investigating the larger incoming invoices when a rescheduling campaign is on.

DEPARTMENTAL PAY ROLL SUMMARIES.—One of the most helpful and important of the condensed controls is a departmental classified summary of the weekly pay roll of which a form is shown in Fig. 4. Before any such summary can be designed, attention must be given to the departmental and sub-departmental organization of the factory, by progressive production units, and the application thereto of a group serial employe numbering scheme. For example, in an automobile factory it would not be sufficient to provide a separate series of employes' numbers for the motor manufacturing department, but that department should in turn be subdivided into minor production units, such as crankshaft, camshaft, piston and other units.

ARRANGEMENT OF PAY ROLL SUMMARIES.—The pay roll itself should so be arranged through the use of subtotals, that it is possible to prepare readily a summary showing the number of employes and total roll for each unit, together with average costs based upon the production of each unit. This summary should also show combined totals for all units of a department with departmental averages.

This **department summary** can be so adapted as to show subtotals of each division of the pay roll, such as productive labor, non-productive labor, overtime bonus, idle time allowances, shop orders for plant extensions, expense orders, foremanship, etc. The figures shown on the departmentalized and classified pay roll summaries should be given weekly to the various department heads for the purpose of controlling their labor expense.

A condensed summary covering the complete factory pay roll of all departments, and showing various averages and percentages, will provide the management weekly with the means of controlling the one expenditure which must be provided for currently—the pay roll. A form of this summary is shown in Fig. 5.

CONTROL OF OTHER ITEMS.—Other items which do not lend themselves to current daily accounting control, but are in reality results of policies decided upon before being carried out by the departmental management, are advertising appropriations, purchase allotments and service expenditures.

Advertising appropriations should be based upon periodical schedules and decisions respecting advertising mediums, space and frequency of insertion. **Purchase allotments** should be decided after adequate data as to current and prospective purchase and sales markets have been prepared. **Service policies**

DEPARTMENTAL PAY ROLL SUMMARY *No. 1* **PLANT** WEEK ENDED *April 26, 1924.*

MR. *Jones* SUPT. OF *Motor, Transmission & Miscellaneous Machining* DEPTS.

DEPARTMENTS		HOURLY & WEEKLY PAY ROLL							SALARY ROLL						
Nos.	NAMES	Employes	Productive Labor	Non-Productive Only	Overtime Bonus	Shop Orders	Expense Orders	Total	Employes	Amount	Total Pay Rolls	Production	Averages All Rolls	Average Prod. Labor Only	
	MOTOR:														
400	Cam Shaft	25	948.80		11.05		50.75	1,010.60			1,010.60	1,120		.85	
410	Crankshaft & Ctwts.	101	4,025.96		45.46		209.83	4,281.25			4,281.25	1,152		3.49	
415	Piston	16	620.42		5.75		1.63	627.80			627.80	7,001		.09	
420	Flywheel	7	378.30		12.75			391.05			391.05	1,231		.31	
425	Motor Sprocket	12	517.15		1.70			518.85			518.85	1,211		.43	
430	Cyl., Cyl. Hd. & Guides	91	3,869.35		33.97	1.40	258.93	4,163.65			4,163.65	1,191		3.25	
440	Crank Case & Brg. Cap	109	4,790.00		68.92		57.58	4,916.50			4,916.50	1,150		4.16	
450	Connecting Rods	35	1,442.38		9.76		44.01	1,496.15			1,496.15	7,056		.20	
455	Misc. Motor Parts	33	1,354.80					1,354.80			1,354.80	1,168		1.16	
458	Manifolds, Fan Pulleys	13	519.30		.20		40.00	559.50			559.50	1,168		.44	
460	Motor Assembly	45	1,848.35					1,848.35			1,848.35	1,168		1.58	
470	Block Test & Power Unit	36	1,544.10		5.30			1,549.40			1,549.40	1,158		1.33	
690	Mach. Cleaners & Sweep.	46			15.00		1,350.00	1,365.00			1,365.00	1,168			
	Foremen & Assts.								19	1,299.00	1,299.00				
	Total	569	21,858.91		209.86	1.40	2,012.73	24,082.90	19	1,299.00	25,381.90	1,168	21.73	18.71	
	TRANSMISSION:														
500	Transmission Case	54	2,216.00		10.15	7.80	54.00	2,287.95			2,287.95	3,425		.65	
502	Misc. Trans. Parts	37	1,303.60				45.00	1,348.60			1,348.60	3,425		.38	
503	Gear Hardening	14	406.75				55.10	461.85			461.85	3,669		.11	
504	Gear Blanking	76	3,259.45		2.85		45.00	3,307.30			3,307.30	3,669		.89	
506	Gear Cutting	47	2,072.95		3.80		42.50	2,119.25			2,119.25	3,669		.56	
508	Gear Grinding	38	1,710.05					1,710.05			1,710.05	3,669		.47	
510	Transmission Assy.	47	1,898.78				34.87	1,933.65			1,933.65	3,614		.53	
	Foremen & Assts.								11	607.00	607.00				
	Total	313	12,867.58		16.80	7.80	276.47	13,168.65	11	607.00	13,775.65	3,614	3.81	3.56	

FIG. 4. Weekly Departmental Pay Roll Summary

To financial manager and department heads the data are vital to labor control and elimination of expense long before monthly figures are ready.

TOTAL PAY ROLL SUMMARY *No. 1 & No. 2* **PLANTS** WEEK ENDED *January 12, 1924*

MR. *Jones* SUPT. OF *All Plants* DEPTS.

DEPARTMENTS Nos.	NAMES	HOURLY & WEEKLY PAY ROLL Employes	Productive Labor	Non-Productive Only	Overtime Bonus	Shop Orders	Expense Orders	Total	SALARY ROLL Employes	Amount	Total Pay Rolls	Avg. Working Hours	Avg. Earngs. Hrly. & Weekly Roll	Pctg. Prod. to Total Roll
	No. 1 Plant													
	Stores Handling	835	9.00	21,569.93	336.61	240.45	2,290.51	24,446.50	46	1,957.00	26,403.50	50	29.28	
	Planning	12		487.95				487.95	20	928.00	1,415.95	50	40.66	
	Traffic								15	700.00	700.00	50		
	Employment								16	597.00	597.00	50		
	Plant Maintenance	529		3,771.42	184.70	7,333.04	6,175.64	17,464.80	18	1,227.00	18,691.80	50	33.01	
	Inspection	279		8,421.78	54.45	520.57		8,996.80	8	407.00	9,4 3.80	50	32.25	
	Motor & Transmission	1,382	52,779.39	625.70	287.54	316.25	2,531.07	56,539.95	39	2,414.00	58,953.95	50	40.91	
	Clutch, Cont. & Misc. Mchg.	1,081	40,784.34	364.25	20.85	89.05	1,471.46	42,729.95	36	2,002.00	44,731.95	50	39.53	
	Tool & Mach. Repair	358		2,817.45	32.12	2,563.82	8,055.96	13,469.35	12	764.00	14,233.35	50	37.62	
	Car Assembly & Shipping	1,164	27,629.75	7,490.72	91.38	28.85		35,240.70	9	641.00	35,881.70	49	30.28	
	Trim & Top	95	2,626.98	37.50	1.00	7.90	143.97	2,817.35	3	172.00	2,989.35	42	29.66	
	Paint	152	5,489.26	67.25	14.56	195.27	550.96	6,317.30	1	123.00	6,440.30	45	41.56	
	Enamel	184	6,259.86		10.60	608.56	36.18	6,915.20	1	92.00	7,007.20	50	37.58	
	Experimental	34		1,160.68	23.42			1,184.10	11	638.00	1,822.10	50	34.83	
	Total No. 1 Plant	6,105	135,578.58	46,814.63	1,057.23	11,903.77	21,255.75	216,609.95	235	12,662.00	229,271.95		35.48	59.13%
	No. 2 Plant													
	Stores Handling	113		3,127.81	3.74	33.90		3,165.45	4	225.00	3,390.45	50	28.01	
	Planning													
	Employment								1	35.00	35.00	50		
	Plant Maintenance	57		397.95	35.28	299.22	1,085.75	1,808.20			1,808.20	50	31.72	
	Inspection	45		1,513.11	4.74			1,517.85			1,517.85	50	33.73	
	Machining	1,130	39,980.69	1,946.35	87.00	141.60	4,255.31	46,410.95	23	1,513.00	47,923.95	50	41.07	
	Total No. 2 Plant	1,345	39,980.69	6,985.22	120.76	474.72	5,341.06	52,902.45	28	1,773.00	54,675.45		39.33	73.12%
	Total Both Plants	7,450	175,559.27	53,799.85	1,177.99	12,378.48	26,596.81	269,512.40	263	14,435.00	283,947.40		36.18	61.83%
	Units Produced (3196)	2.3	54.93	16.83	.37	3.88	8.26	84.27		4.52	88.79			
	Service	108	160.00	3,519.25	150.96	201.96	297.38	4,329.55	85	2,982.00	7,311.55	50	40.09	
	TOTAL PAY ROLLS	7,558	175,719.27	57,319.10	1,328.95	12,580.44	26,894.19	273,841.95	348	17,417.00	291,258.95		36.23	

FIG. 5. Total Pay Roll Summary

E..penditure and average wage earnings by departments, ratios of productive labor to pay roll; average unit costs in each division of labor expenditure.

CASH	To-day	Month to Date
Receipts:		
Balances at Beginning		
Car Drafts		
Parts Accts.		
Proceeds of Notes Payable		
All other Receipts		
Totals		
Disbursements:		
Accounts Payable		
Pay Rolls		
All other Disbursements		
Totals		
Balances at End		
Car Drafts Outstanding:		
Balances at Beginning		
Drafts Drawn		
Total Charges		
Drafts Paid		
Total Credits		
Balances at End		
Factory Employes To-day		

X. Y. Z. CO.
DAILY FINANCIAL REPORT COVERING BUSINESS
FOR 19

ACCOUNTS PAYABLE:	To-day	Month to Date
Credits:		
Balances at Beginning		
Invoices Received		
Credit Memo's Applied		
Total Credits		
Charges:		
Invoices Paid		
R. M. D. S. Applied		
Debit Memo's Applied		
Total Charges		
Balances at End		
Discounts Taken on Payables:		
Car Shipments:		
Domestic		
Foreign		
Parts Shipments		

FIG. 6a. Condensed Daily Financial Report

Provides for summaries of the more important daily transactions and for a perspective of the financial, shipping and employment situations. Provision for accounts receivable, notes payable or other items can be made.

BANKS	Deposits Month to Date	Checks Drawn Month to Date	Deposits To-day	Checks Drawn To-day	Balance To-day
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
TOTAL					

SUMMARY OF DISBURSEMENTS

	Month to Date	Total Yesterday	Paid To-day	
Accounts Payable A to K				
" " L to Z				
" " Advertising				
Total Acc'ts Payable				
All Other Items				
Total Before Discounts				
Less Discounts				
Total After Discounts				

FIG. 6b. Reverse side of Condensed Daily Financial Report shown in Fig. 6a.

Accounts Payable Summary

Acct. Nos.		January	February
	Production Inventories:		
30–32	Production Stores	$5,684,083.99	$7,120,400.78
64–65	Expressage and Freight	78,231.38	79,274.96
	Other Inventories:		
	Jigs, Fixtures, etc., for Production:		
34–36	In All Plants	5,752.26	3,345.36
35	At Suppliers	50,118.30	132,407.47
	Reserve Tools & Machine Repair Parts:		
39	Tools in Plant No. 1	203,582.07	180,023.47
2039	" " " " 2	42,222.99	28,476.24
38	Machine Repair Parts in Plant No. 1	30,370.75	29,174.50
2038	" " " " " " 2	8,001.20	7,887.10
40	Service Parts	118,977.66	82,704.72
51–58	Maintenance & Manufacturing Supplies	185,262.10	187,837.19
	Total Inventory Purchases	$6,406,602.70	$7,851,531.79
101–106	Shop Order Purchases	735.43	340.12
	Fixed Asset Ledgers:		
121	Plant No. 1	24,152.32	45,447.92
1121	" " 2	860.15	
2121	" " 3	9,944.06	15,125.00
	Total Fixed Asset Charges	$ 34,956.53	$ 60,572.92
	Deferred & Accrued Asset Charges:		
113	Prepaid Insurance	4,157.37	
160	Prepaid Freight on Export Sales	37,525.17	87,633.65
166	Accrued Water Taxes		
169	Advertising Space	1,747.35	488.42
	Total Deferred & Accrued Asset Charges	$ 43,429.89	$ 88,122.07
200	Manufacturing Expense Ledger	28,857.38	24,034.77
201	Commercial Expense Ledger	119,738.53	187,005.49
	Total Accounts Payable Summary	$6,634,320.46	$8,211,607.16

FIG. 7. Monthly Classified Summary of Incoming Invoices Credited to Accounts Payable

Scrutiny of actual past experience of this nature when preparing cash budgets may avoid omissions which might prove embarrassing.

are often impossible of control except in a detailed manner by conference with service department management.

CONDENSED DAILY FINANCIAL REPORT.—The data set forth on the forms previously outlined will enable the financial manager to modify his financial program from time to time to suit constantly changing conditions, and to cause steps to be taken by other departments whenever necessary to avoid financial difficulties. Nevertheless, a daily perspective of the cash receivables, payables and shipments on the one form will be found desirable. Such a form of condensed daily financial report is shown in Figs. 6a and 6b.

Summary of Cash Received

Acct. No.		January	February
	Accounts Receivable Ledgers:		
	No 1	$4,001,199.14	$7,633,656.79
	No. 2	304,243.45	248,233.23
	Branches	40,882.44	24,900.40
	C. O. D.'s	6,278.90	6,409.32
	Sundry Debtor	2,635.32	14,589.14
	Total Accounts Receivable Ledgers	$4,355,239.25	$7,927,788.88
	Manufacturing Expense Ledgers (Refunds)	839.55	577.12
	Commercial Expense Ledgers (Refunds)	1,498.78	1,722.99
	General Ledger:		
18	U. S. Treasury Notes & Accrued Interest	67,500.00	1,016,071.43
29	Inter-Company	1,017.81	
109	Investments		
116	Prepaid Interest		
150	Notes Payable Discounted		
151	Accounts Payable	387.94	4,871.89
164	Unclaimed Wages	1,002.95	1,439.80
205	Interest on Bank Balances	4,143.27	8,281.92
209	Miscellaneous Income	79.76	683.87
	Miscellaneous Items	4,646.06	1,878.66
	Total	$4,436,355.37	$8,963,316.56

FIG. 8. Monthly Classified Summary of Cash Received

This summary, by segregating all unusual items, will be a more reliable guide in preparing cash budgets than depending upon total volume of previous cash receipts.

MONTHLY SUMMARIES OF IMPORTANT ORIGINAL ENTRIES.—Cash budgets will be seriously affected if when they are prepared, important items are overlooked, or unusual expenditures for fixed assets are in contemplation and not provided for.

In preparing budgets it will be helpful to have knowledge from actual experience of the average percentages of outgoing shipments which are normally represented by outstanding receivables at the end of the month, and similarly of the average percentages of incoming invoices which are represented by accounts payable at the end of the month.

Monthly comparative classified summaries of the incoming invoices credited to the accounts payable controlling account (Fig. 7), and of the cash received

Summary of Check Register

Acct. No.		January	February
151	Accounts Payable Ledgers	$4,086,630.68	$6,282,158.43
18	U. S. Treasury Notes and Accrued Interest		1,015,178.57
	Accounts Receivable Ledgers:		
20	No. 1	747.65	9,436.26
22	No. 2	5,867.87	3,292.93
26	Sundry Debtor	10,096.50	19,812.61
		$ 16,712.02	$ 32,541.80
29	Inter-Company	3,394.94	2,703.56
	Wages & Salaries:		
162	Factory Pay Roll	893,607.20	1,027,981.20
163	Salary Rolls	163,258.35	172,261.89
164	Unclaimed Wages	1,541.15	1,215.90
		$1,058,406.70	$1,201,458.99
116	Prepaid Interest		
120	Real Estate, Plant, etc		
150	Notes Payable		
166	Capital Stock Tax		
166A	Accrued City Taxes	135,489.82	
166B	Accrued State & County Taxes		61,645.39
167	Income Taxes		
168	Excise Taxes	62,450.47	257,726.23
186A	Dividends		900,375.00
200	Manufacturing Expense Ledger	4,712.17	1,763.79
201	Commercial Expense Ledger	12,573.14	9,668.35
	All Other Items	2,472.62	5,697.39
	Advertising Ledger	101,610.41	115,325.62
	Total	$5,484,452.97	$9,886,243.12
	Less Discounts on Purchases	40,362.50	50,638.97
	Net Payments	$5,444,090.47	$9,835,604.15

FIG. 9. Monthly Classified Summary of Check Register

Direct cash payments for pay rolls and for notes, taxes and unusual items not going through accounts payable are here clearly set forth.

Accounts Receivable Controlling Account

	January	February
Balances at Beginning	$ 165,744.38	$2,070,352.24
Sales	5,928,611.82	9,521,338.91
Totals	$6,094,356.20	$11,591,691.15
Collections & Credits	4,024,003.96	7,640,753.27
Balances at End	$2,070,352.24	$ 3,950,937.88
Ratios of balances at end to current month's sales	35%	41%

FIG. 10. Summary of Accounts Receivable Controlling Account

book (Fig. 8) and the check register (Fig. 9) will be of assistance in preparing future estimates.

Condensed summaries of the accounts receivable controlling account (Fig. 10) and accounts payable controlling account (Fig. 11) will furnish average percentages showing the relation between outstandings at the end of the month with the current volume during the month.

Accounts Payable Controlling Account

	January	February
Balances at Beginning	$2,516,504.18	$ 5,066,315.80
Add: Invoices Net of R. M. D.'s, etc.	6,636,054.36	8,190,825.46
	$9,152,558.54	$13,257,141.26
Deduct: Payments, Current Month	4,086,242.74	6,277,286.54
Balances at End	$5,066,315.80	$ 6,979,854.72
Ratios of balances at end to current incoming invoices	76%	85%

FIG. 11. Summary of Accounts Payable Controlling Account

Condensed summaries of controlling accounts similar to the above will furnish ratios of outstandings at the end of monthly periods to the total monthly transactions. These percentages are valuable in preparing cash budgets.

Supervision of Cash Receipts and Disbursements

GENERAL.—Supervision of the current details in connection with the handling and recording of cash receipts and disbursements will be successful only in proportion to the completeness of the safeguards thrown around the handling of the cash, to the efficacy or otherwise of the accounting records in requiring prompt and correct entries and in providing internal check thereon, and to the extent to which the financial manager is in touch currently with the actual conditions, through the filing with him of periodical reports and the following up of unusual or unsatisfactory situations.

Financial managers cannot be successful by holding aloof from detail. Finances and accounts consist of detail, and the financial manager will do well to realize that the **secret of control of details** lies in classification thereof, in providing simple routine methods and records, and requiring current reports in such form that they cannot be prepared unless the work has been done correctly and is up to date. Condensed references to important fundamentals to be borne in mind in connection with the design and use of the records, and with office practice in handling of the cash, will be of assistance to the financial manager.

DAILY REPORTS.—Actual cash receipts and disbursements should be reported daily to the financial manager. They may be covered in one daily financial report (Figs. 6a and 6b) with cash balances, and other financial data, where the items do not vary greatly in nature. Where it is desired to follow daily transactions in more detail, it will be found practicable to use also one or more of the forms described in detail in the preceding pages of this section.

Reports must tell a complete and true story. This can be assured only if the figures used in the reports are practically all summaries or totals of the current transactions shown by the detailed cash records, and if separate general ledger or expense ledger controlling accounts are provided to control such of the receipts and disbursements as can be separately classified because of difference in nature, in method of handling, or in the period of collection or disbursement.

One of the simplest and most practical pieces of office equipment is the ordinary loose leaf I–P binder. Instead of keeping reports in separate folders, if all of them are kept in such a binder, with indexed stiff sheets separating each kind of report, the whole story of the vital elements of financial control will always be at the fingers' ends, and all of such reports will be referred to oftener than if filed away in folders in a cabinet.

CLASSIFICATION OF RECEIPTS.—The nature of various receivables, the methods and times of collection, the geographical location of customers, branches and bank depositories, are the more important items which will affect decisions as to the nature of the cash records and the extent of the classifications of the receipts for which separate ledger controlling accounts should be provided.

In every case where receipts of similar nature aggregate a large percentage of the incoming cash, or consist of a large number of items, or are of importance for other reasons, they should be covered by separate regular reports; separate cash book columns or separate cash entry forms should be used for recording the details, and separate ledger controlling accounts should be provided for each class of receipt. Items usually controlled in this manner are accounts receivable (which may in turn be subdivided and separately controlled with respect to territorial, alphabetical, or other classifications), sight drafts, notes receivable, acceptances receivable and foreign drafts.

Receivables to be paid by officers or employes should be in separate general ledger controlling accounts and not included with those arising during the regular course of business. Inter-company and branch accounts should be covered by separate general ledger accounts for each branch or allied company.

ACCOUNTS RECEIVABLE.—The use of a daily cash receipts control (Fig. 2, page 296) will give the financial manager a good idea of how the current collections are running, while a separate receivables control showing the aggregate receivables outstanding at the close of each day will tell whether or not collections are keeping pace with shipments. The first mentioned form will be found to be particularly helpful in cases where the sales are made on terms of 10 days, 30 days, or other specific time after shipment, as the daily average collections can be readily compared with the daily average sales for the corresponding previous shipment period shown by the shipments control.

Collections Facilitated by Schedule of Balances.—Where the sales terms are 10th proximo or other specific date following an entire month's shipments, collection supervision will be facilitated if the financial manager will have schedules prepared of balances in excess of a specific amount, such as $5,000 for large customers and smaller limits for smaller ones. The use of such schedules, prepared immediately after the close of the month's business, and forming the basis for following up collections during the succeeding month, may often prove to be important in the successful carrying out of a financial program.

Discount Notices.—Some companies make it a practice to send out notices to reach debtors a few days before discount dates reminding them that if they pay their bills by a certain given date they will be entitled to a specific discount named in the notice. This involves a large amount of work where notices are sent to every debtor; where the amounts are large the debtor usually sees to it that he takes the discount. In some businesses, however, this practice may be justified if the amount of working capital is limited.

Schedules of Overdue Accounts.—The financial manager should require schedules of overdue accounts to be submitted to him at least monthly and

oftener if conditions make it practicable. The failure to require these schedules regularly on a fixed date and the neglect to currently supervise the collections of these overdue accounts have embarrassed many companies. It is a mistaken policy to allow collection departments to keep writing indefinitely to customers. If remittance is not forthcoming after three or four letters to customers, it is usually because the latter cannot pay, they will not pay or they have some grievance or offsetting claim; if any of these contingencies obtain, the matter should have executive action. It is well, therefore, if the financial manager will follow these overdue accounts quite closely, after a fixed maximum of letters have gone forth from the collection department, until he can classify his customers, or the reasons for unsatisfactory collections, and then decide on policies which will result in a minimum of losses from accounts receivable, and in better current collection results.

Form of Accounts Receivable Ledgers.—Whether the receivable ledgers should be in loose-leaf or in card form will depend upon how much memoranda need be posted in addition to the figures, how much handling the records will receive and the number of entries during the course of the month. Bound books are practically obsolete and the use of many notations in posting is being discouraged. Machine posting is very desirable where there are a great number of daily entries and the notations can be condensed to a few standard items. Whatever form is used care must be taken to prevent access to the records except by authorized persons in the collection and accounting departments in order to prevent loss of individual ledger sheets or cards. All forms should provide for the notation of any special terms to which the customer may be entitled.

It is of the utmost importance that fireproof cases or vaults be provided for the keeping of all accounting records. It is almost impossible to make collections after a fire, even if the receivable records have been preserved intact, unless the original entry data are also available.

Treatment of Various Classes of Accounts Receivable.—Accounts with the officers and employes should be scrutinized by the financial manager personally at stated periods, but in any event not less than monthly. **Accounts receivable against suppliers or other creditors** should at the close of each month be transferred by journal entry from the accounts receivable to the accounts payable records. **Consigned accounts** should be scrutinized at least monthly by the financial manager and at definite dates the status of the accounts should be checked through the sales or manufacturing departments to ascertain whether any or all of the account has become collectible by reason of the consigned goods having been disposed of or accepted by the customer or whether the consigned goods have been returned, thus necessitating an adjustment in the account.

Accounts Receivable to be Kept at Main Office.—Wherever possible, all accounts receivable ledgers should be kept at the main office and not at branch offices, and statements should be mailed direct from the main office to customers' addresses. Where branches are permitted to carry the details of their own accounts, monthly detailed trial balances should be transmitted to the head office; these should be **"periodized"** (showing in separate columns by months the amounts accrued in each period) at least quarterly. Such trial balances should be carefully scrutinized at the head office. All accounts overdue for 30 days or other definitely fixed period should be transferred to the head office, where they can be kept in a separate "overdue" account for each branch and come under direct supervision of the financial manager; of course, collection efforts even in such cases need not be relaxed by the branches.

It is a good practice to occasionally have traveling or head office auditors compare all monthly statements with the receivable ledgers and mail them direct to both the head office customers and the branch customers with a printed request to notify the financial manager of any discrepancies in the statements or claims not adjusted thereon.

Control of Opening New Accounts Receivable.—Adequate control of accounts receivable includes the prevention of the opening of new accounts except upon proper written authority of the credit department after full credit investigation of new prospective customers. This authority should come through to the accounting department in the shape of card containing proper data signed by the credit manager. It is important, however, that the credit department be advised currently of any unsatisfactory condition of receivable accounts, or exceeding of prearranged credit limits, which limits should appear at the head of every customer's ledger account.

C. O. D. ACCOUNTS.—C. O. D. accounts can best be handled in one of two ways. The first method is to keep one ledger account for all C. O. D. customers; to provide for a separate series of numbers for each debit entry, and to use "opposite posting" for the receipts or credits (posting them on the credit side of the ledger sheet on the same line as the original debit entry). This method is good for hand-posted receivable ledgers only. The second method is to provide a separate series of consecutive numbers for all C. O. D. invoices, and have an extra copy of each prepared on stiff ledger paper or cardboard. These extra copies may then be used to form a numerically or an alphabetically arranged loose leaf subsidiary C. O. D. accounts receivable ledger, from which the accounts may be removed to a transfer file as they are closed. Of course, C. O. D. accounts should be covered by a separate general ledger controlling account.

SIGHT DRAFTS.—The best control over sight drafts can be obtained by the use of a series of consecutive draft numbers, by preparing the drafts in triplicate, with each copy of a different color, and using the copies as follows: Attach all bills of lading or other documents to the original draft (white) and put it through the bank, keep the duplicate (yellow) in the office for filing and follow up purposes, and mail the triplicate (blue) to the customer with the request that he insert on this copy (in a space especially provided) the date on which he pays the original at his bank, and return this copy to the drawer. This practice saves money in interest by speeding up collections from customers and intermediate collecting banks in cases where much of the current business is done through the use of sight drafts; it has been known to prevent actual losses by quick action where collecting banks have made collections from the customers but did not remit promptly to the drawer's bank.

The Federal Reserve System of district and branch banks can be utilized to great advantage by concerns doing a national business. Arrangements can ordinarily be made with a bank which is a member of this system for the immediate transmission by telegram (by credit to the member bank's account at the federal reserve bank nearest the point of origin) of all collections at a distance by branches of the federal reserve bank. As much as 7 days have been saved in elapsed time by this method over previous ordinary bank collection practice.

NOTES AND ACCEPTANCES RECEIVABLE.—Notes are sometimes desirable because they represent a definite settlement with respect to amount and date of payment. Certain creditors take advantage of such settlements, however, by giving a note for 4 or 6 months and then at maturity sending

along a check for an insignificant portion and a renewal note for almost the entire amount thereof. While in some rare cases it may be good business to carry such a customer, it should be recognized that the practice is usually the result of habit. A good way to break it is to insist that notes be given for smaller amounts, maturing currently, either weekly or semi-monthly, with the understanding that they must be met in full at maturity.

Trade acceptances serve the same purpose as notes in that they are definite promises to pay on specified maturity dates. They have some advantage over open accounts in that they provide readily discountable paper and bring the customer right up to the necessity for settling at maturity, which is not necessarily the case with open accounts. Another advantage lies in that a trade acceptance usually is in settlement for but one definite commercial transaction, and thus is free from complications which arise in attempting to secure settlement for an entire series of current transactions.

Desirability of Discounting Notes and Acceptances Receivable.—If possible to do so, notes and acceptances receivable should be discounted. This

$\$$_____ DETROIT, MICH._____

ON_____ AFTER DATE_____

PROMISE TO PAY TO THE ORDER OF_____

_____ DOLLARS

WITH INTEREST AT THE RATE OF_____ PER CENT PER ANNUM, AT_____

_____

FOR VALUE RECEIVED. EACH AND EVERY PARTY TO THIS INSTRUMENT, EITHER AS MAKER, ENDORSER OR OTHERWISE, HEREBY WAIVES PRESENTMENT FOR PAYMENT, DEMAND, NOTICE OF DISHONOR, PROTEST AND NOTICE OF PROTEST THEREOF.

NO._____ DUE_____ _____

FIG. 12. Note Receivable

Notice particularly the waiver clause with respect to presentment for payment, demand, notice of dishonor, protest and notice of protest. This is binding upon guarantors of such notes, even though the guaranties are covered by separate instrument.

not only provides immediate liquid funds but avoids the possibility of loss through release of endorsers (and also of guarantors or sureties if covered by separate instrument) if the paper has been inadvertently held over a day longer than should have been the case before presentation. The banks are familiar with all the detailed legal requirements as to notice, demand and protest in connection with makers, acceptors and endorsers on such paper, and by discounting, the responsibility for the fulfilling of those requirements is transferred to the bank. In order to prevent any advantage accruing to the maker or endorser of a note, in case of any clerical oversight or to prevent any unwarranted claim being made that the exact technical legal requirements were not carried out, notes or acceptances should be used containing a specific waiver clause similar to that in the note shown in Fig. 12.

It is good policy to insist that all notes and trade acceptances read so as to be payable at bank and not at an individual or business address.

Records of Notes and Acceptances Receivable.—One register can be used to cover both notes and acceptances receivable, as the entries for accept-

ances may readily be identified by separate series of numbers, or by the use of the prefix "A". This may be a **card register** or it may be in the form of a **bound book** containing the details as to numbers, dates, makers, endorsers, amounts and maturities. A card record of maturities should also be used where great quantities of notes are handled; this record need only show register numbers on separate cards for each maturity date; it is practically a maturity reminder and collection record. Where the quantity of such paper taken currently is not great, the usual form of notes receivable book combining all the above data and classifying it by maturity dates through the use of separate vertical columns for entering the amounts in the months in which the notes mature, will be found satisfactory. It may be found desirable to also keep the notes themselves filed by maturity date as an additional check to insure the presentation at maturity of any undiscounted paper.

NOTES AND ACCEPTANCES PAYABLE.—Irrespective of whether the quantity of notes payable issued for the year is large or small, some sytem of **consecutive numbering** of the notes should be used. Blank notes should be so numbered before they are padded. Where quantities of such notes are sold as commercial paper, it has been found desirable to use a special form of note printed or engraved in multiples of $5,000. In such cases each denomination should have an identifying color and letter prefix to its consecutive numbers. The accounting for the proceeds of commerical paper issued in this systematic manner is comparatively simple.

Acceptances payable are practically notes payable, but they should have a series of numbers entirely separate from those used for notes payable issued for borrowed money.

Records for Notes and Acceptances Payable.—Registers for recording the details of such paper may be similar in form to those hereinbefore mentioned under the heading of Notes and Acceptances Receivable. All entries in cash receipt books (for proceeds of borrowed money) or other records should refer to these register numbers.

Monthly Summaries Desirable.—A summary of all such outstanding paper should be prepared from such registers at least monthly. This summary should disclose the amounts maturing during each of future months, and during even subdivisions of the next coming month, to enable proper provision to be made therefor in the current cash budget or in a financial program for an extended period.

Marking Paid or Renewed Notes.—Paid or renewed notes and acceptances should be marked with date and memorandum to show the nature of the transaction by which the paper was retired. In no event should the notes be destroyed until after the regular audit by public accountants.

CASH SALES.—The fundamentals to be borne in mind in planning for the **control of cash sales** from a record standpoint, are: (1) the purchaser should receive a consecutively numbered cash or counter slip or an invoice in exchange for his cash; (2) a copy of such cash slip should remain in the hands of the selling organization, either with the cashier or the sales clerk, and in some cases, with both; (3) provision should be made for daily summarizing of the sales slips of each clerk and of each department; and (4) internal check or audit should be going on continually between the records of the departmental sales clerks and the cashiers.

Need of Serially Numbered Cash Sales Slips.—Separate serial numbers for departments, for sales clerks, and for cash sales slips are necessary for auditing

and current sales statistical purposes; such numbers should show on all copies of the sales slips. Sales slips bound in sets to form "fillers" for stiff back binders for the use of the sales clerks, are very practical. Card summary forms should also be provided for these binders so that each sales clerk can mark down the total amount of each sales slip in numerical order, and turn in the entire binder (with sales slips and summary) to the auditing department at close of each day. Two binders and series of sales slips for each sales clerk will enable the latter to use one binder and series of slips on alternate days while the other is in the hands of the auditing department; thus each day's cash sales may be audited on the day following the transactions.

Designation of Charge Sales Slips.—If charge sales slips are used in the same binder as cash sales slips, separate identifying features should be used, such as paper and printing of special color, special design of form and separate serial numbers.

Cashiers Summary.—Cashiers should be designated for a specific department or group of departments. Each departmental cashier should prepare a daily summary to be turned over to the head cashier with total cash receipts for the day. This head cashier's summary should, of course, be checked in the auditing department against the recapitulation by departments of the audited summaries of the cash sales turned in by the departmental sales clerks.

Control Where Cash Sales are Infrequent.—In factories or establishments where the number of daily cash sales transactions is comparatively insignificant, there may still be plenty of opportunity for loss through cash sales of scrap, boxes and other containers, as well as through occasional sales of finished product. Wherever practicable to so arrange, deliveries should not be made from stock departments, but through the shipping department, and the latter should require a cash sales ticket from the cashier specifically setting forth what should be delivered to the cash purchaser.

Passes Required for Packages.—The use of passes for packages or trucks going through the factory gate has been found practicable and has prevented the disappearance of assets which might otherwise have been carried off without having been paid for. Receipted invoices for cash sales are sometimes used in place of such passes; when so used, the watchmen should pick up the cash sales slips and turn them over to the auditing department for audit against the cash sales receipts and also to prevent their being again used on a following day to pass wrapped and pilfered articles.

MISCELLANEOUS RECEIPTS.—

Receipts from Subscribers to Security Issues.—Accounts with individual subscribers to stock or other securities disposed of should be treated as are other accounts receivable. If journal entries are made for the sales of the securities, the receipts from the subscribers should be handled in manner similar to remittances from other debtors. If the number of such subscribers is large, or payments are to be made on an instalment basis, separate subsidiary ledgers may be used for the individual accounts and all of them covered by separate controlling general ledger accounts. A separate column in the cash received book would also have to be provided. This method of handling will enable effective collection control to be had over such accounts.

Receipts of Royalties, Rents, Interest and Dividends.—Miscellaneous regular collections such as those on account of royalties, rents, interest and dividends on securities can be controlled (1) through the use of cards which permit of filing by maturity dates, (2) through the use of loose-leaf registers

containing separate sheets for various months on which are vertical columns covering the various days of each month, or (3) through the use of extra copies of invoices or other original notices of demand for payment, which may comprise a subsidiary ledger for items of a specific class of income.

All of such records are, however, collection reminders and not actual collection controls. It is desirable, in addition thereto, to provide records which will at once show whether all the collectible income from each and every source has been received. This may be accomplished through specially designed sheets on which can be kept a regular ledger account with each mine or patent producing royalty, with each property leased to one tenant, (or separate sheets for each tenant, if more than one) or with each mortgage or other security owned. This may be a regular subsidiary ledger account with respect to the principal values of an asset owned, and may be a collection memorandum record with respect to the income therefrom. Below descriptive headings, regular ledger rulings should be used for the posting of transactions affecting the principal and a separate set of ledger rulings for the posting of the income items.

INTER-COMPANY CASH TRANSACTIONS.—Where the cash transactions between affiliated companies are many, it is usually desirable not only to keep a current controlling account with each company on the general ledger, but to also provide **additional detailed accounts for various classes of transactions,** even to the extent of a separate "Cash Remittance" and "Cash Received" account with each company. Transfers of the total of the monthly entries in such classified accounts should be made to a controlling general ledger account summarizing all the transactions with the company.

The controlling company should, of course, receive regularly detailed statements from each allied company, for comparison with the head office ledgers. The use of separate accounts for inter-company outgoing remittances and incoming receipts will simplify the auditing of the general ledger controlling account with the allied company and will enable identification to be made of items in transit at the close of a month. This practice will also enable an auditor to compare elapsed time between original remittances on either side and the dates upon which the funds reached their destination, and should put him quickly upon the trail of any shortages which are being made good from subsequent transactions.

CASH IN TRANSIT.—The policy should be adopted of requiring regular remittances to the head office from all affiliated or controlled sources from which incoming cash is expected, whether these sources are factories, branch sales offices or allied companies and whether located in domestic or foreign territory. Where the amounts involved are of some size, daily remittances will be desirable; in any event, however, remittances should be required at least semi-monthly. The use of a consecutively numbered form of remittance slip will simplify the record work in the offices at both ends of the transactions and make it easier for auditors to verify cash which may be in transit at any audit period.

Cash from Foreign Branches or Affiliated Companies.—In cases where branches or allied companies are located in foreign countries, it should be decided whether the head office should draw drafts on the foreign offices and sell them in the local market, or whether the manager located in the foreign country should remit through the medium of purchasing and cabling of dollars. The latter is usually found to be the more practicable method, since the head

office naturally cannot always be informed as to the latest status of the accumulated cash in the foreign country.

Data on Remittances from Foreign Branches.—All remittance slips covering remittances from foreign countries should set forth at least the total in dollars and their equivalent in foreign currency, so that the head office may check up these slips against the monthly statements of account from the foreign branch or allied company.

Accounts of Foreign Branches in Dollars and in Foreign Currency.—Allied companies or branches located in a foreign country should keep their accounts with the head office in foreign currency and also in dollars. A complete transcript of the account should be sent monthly to the head office setting forth each transaction in both currencies. To simplify **reconciliation** with the head office books, it will be found practicable to provide for regular balancing such accounts on the head office books on a specific day prior to the actual end of a calendar month; the exact date on which such balancing should take place depends upon the average number of days which elapse before mail can pass between the two offices.

CASH HELD IN BRANCHES AND FOREIGN COUNTRIES.—Irrespective of the geographical location of any branch or affiliated company, the policy of depositing all receipts daily in the local bank account should be adhered to. The cash not yet remitted to the head office would thus always be on deposit in the local bank account of the branch or allied company.

Control of Bank Deposits of Branches.—The simplest method of controlling cash at branches making their own local collections is to let each branch have **a separate "operating" bank account** for an imprest fund to be replenished at regular periods by check from the head office to cover branch expense reports; then to require all branch collections to be deposited in a separate "branch collections" bank account against which are drawn only such checks as are remittances to head office. It may even be found desirable in cases where domestic branches are operating under this plan, to provide that only the head office may draw checks against such collection bank account; where this is done, the local bank account at the point where the branch is located becomes in reality a head office bank account, and it will then become necessary to treat all branch deposits in such bank account as if they were direct remittances to the head office, and make entries accordingly on the records both at the branch and at the head office.

Monthly Bank Statements of Branch Accounts to be sent to Head Office.—Certificates of balances from local banks covering the "operating" bank account of branches or allied company offices should be required by the head office at least monthly. In some cases (and always where the separate "branch collections" bank account is used) it is desirable to have the monthly bank statements and checks sent to the head office direct by the local bank.

Withdrawals from Bank Accounts of Branches.—All local bank accounts of branches, both domestic and in foreign countries, should be deposited under arrangements which permit withdrawal by designated executives of the head office as well as by the properly authorized persons of the branch; this arrangement may prevent embarrassment in case of unforeseen circumstances occurring at the branch.

DISCOUNT INCOME FROM ACCOUNTS PAYABLE.—Income from discounts has become an important item in present-day business and if the capital structure of an institution has been properly planned and carried out, and

credit relations with banks satisfactorily established, advantage should be taken of all available discounts on suppliers' invoices. Where a business is highly competitive and dependent for profits principally upon continuous turnover within comparatively short periods of time, the proper control of discounts may mean the difference between a financially successful and a disappointing year.

Control of Discounts on Accounts Payable.—Successful control of discounts on accounts payable consists of two parts: (1) close co-operation between accounting and purchasing departments in deciding upon policies to be carried out by the purchasing department, and (2) effective plans for handling the office detail in connection with incoming invoices, from the time they first arrive in an establishment until they are paid on or prior to the date on which the discount period expires.

Distributing Discount Dates.—It is an almost superhuman task for any large establishment to pay all its invoices within 10 days after invoice date; goods ought to be received and inspected before invoices are paid and quite often more than 10 days elapse between the time of shipment and the receipt of the goods. To pay all invoices on the tenth proximo covering an entire previous month's purchases presents similar difficulties as many of the goods shipped during the latter half of the previous month may not arrive before the tenth proximo. In both cases time must be allowed for the routine auditing of the invoices with respect to actual quantities received, correctness of unit prices, extensions and footings, checking of terms, and the re-charging for shortages and of transportation paid on goods purchased on f.o.b. destination terms.

Where the magnitude of business done with individual suppliers justifies it, it should be arranged that settlements for most of the current purchases be made so as to distribute the work over the entire month. These payments may in some cases be made on the 10th proximo, others on the 15th proximo and still others as late as the 20th and 25th proximo.

Even where suppliers are dependent upon rapid turnover, it has been found practicable to arrange for making settlements on the 10th proximo for purchases during the first half of the preceding month, and on the 20th proximo for purchases during the last half of the previous month, all on a discount basis.

Accounts Payable Ledger Sheets Should Indicate Discount Terms.—All accounts payable ledger sheets should clearly specify the discount terms. Ledger sheets of different color have in some cases been successfully used to insure the examination of the accounts payable ledger just prior to specific dates and the payment of all discountable invoices before the expiration of the discount period.

Use of a "Kicker's Sheet."—Even in cases where arrangements have been made with creditors for paying on a definite date all invoices for previous month's shipments, it has been found that, for various reasons, some suppliers insist on construing the terms to mean that they must actually receive the remittance on or before the last discount date, and they will refuse to allow the discount if the check arrives on the day following. Such suppliers can be readily taken care of by inserting in the front of each accounts payable ledger a "kicker's sheet" setting forth the name and discount date of such suppliers and using this sheet as a guide in sending remittance a day or two previous to the date on which remittance would ordinarily be sent.

Use of "Short Discount" Card.—In addition to those accounts previously referred to as being payable on definite dates following current month's business, a great number of smaller invoices must be paid within a discount period specified

on each invoice. In such cases it is not practicable to use the accounts payable ledger as a basis of control. A "short discount" card has been successfully used for this purpose. Such a card need only refer to the name of the supplier, date and amount of invoice, discount terms, and final discount date; by filing them according to last discount date, or a day or two previous thereto, the invoices themselves can be taken from the files and checks drawn therefor before the expiration of the discount period. In comparatively small establishments it may be feasible to file the invoices themselves according to latest discount dates and dispense with the short discount card.

Discount of Invoices with Unadjusted Items.—If for any reason discountable invoices are not in shape for final payment by the time the discount period is nearing expiration, it is always possible to make payment on account and take discounts on those partial payments. It is usually a mistaken policy, which only results in loss of cash discounts and in creation of ill will, to refuse to pay an invoice of considerable size because there are unadjusted items which may eventually result in a very small recharge, and then to attempt to take the discount when the items have been adjusted long after the expiration of the discount period.

DISCOUNTS ON RECEIVABLES.—Discounts on accounts receivable are of course reductions from income; nevertheless, if not handled correctly, they may affect the income more than should be the case. Serious losses have actually occurred to concerns due to neglect to audit discounts taken by debtors; discounts should be allowed only on the **amount actually paid net** of any recharges or deductions, and not on the gross amount before such deductions.

Policy on Payments Received after Expiration of Discount Period.—A definite policy should also be decided upon and rigidly adhered to with respect to payments arriving after the expiration of the discount period; a maximum of from 1 to 3 days' grace is the usual basis of such a policy, although exceptions might be made in cases where elapsed mailing time is a consideration.

Monthly Statements Should be Mailed Promptly.—Of course, debtors cannot be expected to make prompt remittances if monthly statements are not mailed to them promptly, and any laxity in this regard must be borne in mind. If delay is unavoidable because of the nature of a business, the receivables ledger should be closed a day or two previous to the close of the month.

VERIFICATION OF ALL DISCOUNTS.—The amounts of the discounts taken on both receivables and payables should be verified by comptometer operators or individual clerks checking each supplier's invoice and each incoming remittance. In cases where a supplier's monthly statement forms the basis for the preparation of a creditor's settlement statment to accompany outgoing checks, it is always a good policy to have the discount checked by a party other than the one preparing the settlement, as it is easy to lose considerable sums of money in large statements by an error in proper location of the decimal point or even in subtraction of the discount. It is also a good policy to each day have the cash book entries for the previous day scrutinized with respect to the correctness of the discounts deducted by customers from incoming remittances.

Collecting and Recording of Cash Receipts

GENERAL.—Centralization of responsibility for the making of collections from charge customers, standardization of forms and simplification of methods, whether the collections be made by mail or through office cashiers, are

the more important items to be borne in mind in planning for the making of collections and the recording of cash receipts.

Collections may be divided broadly into **three divisions:** (1) incoming mail remittances, (2) payments to office cashiers, and (3) collections by field representatives. While the various office units handling each division will operate differently, and the record forms will be diversified, the control of collections should come under one department head.

Few businesses have any more complex collection problems than department stores. They carry both current charge accounts and instalment accounts; they handle great quantities of small remittances which come in by mail and through office cashiers; they also use field collectors. For this reason the methods and records used in large metropolitan department stores will furnish the principal basis for this outline. The references will not be limited, however, to department store practice, and suggestions will be included, without specific mention, where practice in other lines of business has brought forth ideas worthy of the consideration.

ORGANIZATION.—All the business and data in connection with the opening of customers' accounts, the current entries thereto and the collection of the balances therein, should be concentrated in one department under a credit and collection manager. This department may be subdivided into: (1) credit unit, (2) accounts receivable unit, and (3) collections unit.

The Credit Unit should be responsible for gathering credit data and authorizing the opening of accounts with proper limitation of credit. The functions of this unit should be so co-ordinated with the sales unit that the credit unit can approve sales orders after ascertaining that such orders, together with the unpaid items, the credit limit of the customers is not exceeded.

The Accounts Receivable Unit should limit its current activities to the preparation of the customers' ledgers and statements and the current postings thereto from the various sales, credit and collection slips. This unit should also be responsible for the balancing of the ledgers against one or more general ledger accounts receivable controlling accounts. The opening of separate customers' accounts each month will enable the accounts receivable unit to turn over to the collection unit the ledgers covering all business done during the preceding month and showing the balances at the end thereof.

The Collections Unit will have possession of the accounts receivable ledgers containing all items prior to the first of the current month. This unit should be located very close to the accounts receivable unit as it must examine the current ledger accounts to keep posted on the continually changing current condition of customers' accounts. All field collectors should form a part of the collections unit.

While the collections unit should be held responsible for the collection of all accounts receivable, it should not exercise any control over the mailing department (through which mail remittances are received) nor over the cashier's department which handles the incoming cash. **The Mailing Department** should report to the office manager, who, of course, should turn over to the cashier's department all incoming remittances and any correspondence accompanying them. In such cases, it is good policy to use a rubber stamp which makes an impression designating the various kinds of remittances such as check, money order, currency, etc., with a space to the right of each designation for the mail clerk to insert in heavy blue pencil the amount of the remittance. The **Cashier's Department** should report direct to the comptroller.

CUSTOMERS' STATEMENTS AND LEDGERS.—In retail merchandising institutions, the form of customer's monthly statement can be so designed as

The X. Y. Z. Co.

Sold to

MISS JANE DOE, C
1255 W.BOSTON BLVD., 6-25
DETROIT MICH. 73462

TEAR OFF THIS SLIP AND ENCLOSE WITH YOUR CHECK TO ASSURE PROPER CREDIT BEING GIVEN. YOUR CANCELLED CHECK WHEN RETURNED BY YOUR BANK IS A VALID RECEIPT. ACCOUNTS ARE DUE THE FIRST OF EACH MONTH.

The X. Y. Z. Co.

DATE	1924 ITEMS		DAILY TOTAL CHARGES	CREDITS	BALANCE
JULY	BALANCE FROM LAST MONTH				191 33
1	1 PR PILLOWS		5 00		196 33
2	12 SOAP	1 44			
	12 SOAP	1 00			
	4 APW	1 75			
	1 POLISH	65	4 84		201 17
12	CASH			191 33	
	2 ROLLS PAPER	1 00			
	2 MATS	4 00		5 00	4 84
12	2 PILLOWS	5 00			
	¾ YD LACE	71			
	¼ YD LACE	56			
	4 PERC TOPS	10			
	1 CAN BLACK LEAF	1 25			
	1 KNIFE	1 15			
	1 FILE	75			
	2 PADS PAPER	30			
	1 ENV	20	10 02		14 86

FIG. 13. Original of Customer's Detailed Statement Used in a Department Store

The statement and ledger account are prepared at one time by machine posting. Note the perforated heading to be detached and used as a remittance slip to accompany the customer's check.

	DEBIT		CREDIT			ANALYSIS DEBIT		CREDIT			DEBIT		CREDIT	
JAN					MAY					SEP				
FEB					JUN					OCT				
MAR					JUL					NOV				
APR					AUG					DEC				

MISS JANE DOE, C
1255 W.BOSTON BLVD., 6-25
DETROIT MICH. 73462

		JULY				191 33
✡	191 33	1	1 PR PILLOWS		5 00	196 33
✡	196 33	2	12 SOAP	1 44		
			12 SOAP	1 00		
			4 APW	1 75		
			1 POLISH	65	4 84	201 17
✡	201 17	12	CASH		191 33	
			2 ROLLS PAPER	1 00		
			2 MATS	4 00	5 00	4 84
✡	4 84	12	2 PILLOWS	5 00		
			¼ YD LACE	71		
			¼ YD LACE	56		
			4 PERC TOPS	10		
			1 CAN BLACK LEAF	1 25		
			1 KNIFE	1 15		
			1 FILE	75		
			2 PADS PAPER	30		
			1 ENV	20	10 02	14 86

FIG. 14. Accounts Receivable Ledger, which is a Duplicate of the Customer's Statement

The analysis data is filled in by the bookkeepers in accounts which start the month with balances which are still unpaid at the close thereof.

to be a vital factor in facilitating collections and in keeping the office detail down to a minimum. Fig. 13 is a modern statement form used, with slight modifications, in large department stores. A duplicate thereof, with a 3-inch binding edge to the left, forms the accounts receivable ledger. Current postings are made simultaneously by machines to both statement and ledger forms from the charge sales and credit slips prepared by the various departmental sales clerks and from the cash remittance slips coming through the cashier's office. Particular attention is called to the fact that the top part of the customer's statement is perforated and has instructions printed thereon for the customer to detach and enclose it with the check. In actual practice a majority of the customers send this in with their remittances and they form an important part of the cash receipt record data.

By the use of colors for these forms, separate ledgers may be maintained for isolating instalment accounts or other accounts which might call for special handling because of unusual terms granted to customers.

Separate accounts receivable accounts are opened for each customer monthly. At the end of each month the duplicates are permanently bound to form the accounts receivable ledger for the month just ended, and are then turned over to the collections unit.

A very valuable feature is the use made of the top portion of the duplicate of the form, which becomes the accounts receivable ledger. Since this copy will not have any typing on it, it is so printed as to provide the analysis blocks shown in Fig. 14. If the balance brought over from the previous month has not been settled during the current month, these analysis blocks are filled in by the accounts receivable ledger keepers before the duplicate sheets are bound. Fifty per cent or more of the accounts are usually so settled and require no analysis.

WORK OF A COLLECTIONS UNIT.—Immediately upon receiving the ledgers from the accounts receivable unit, the collections unit should examine the analyses at the head of each overdue ledger account and schedule these accounts on a series of collection follow-up sheets, which form the basis of the collection efforts of this unit. A form of collection sheet is shown in Fig. 15. The headings of the various columns indicate the nature of the information to be scheduled in each. The Remarks column can be used for making current memoranda during the collection process. The reader hereof should catch the idea behind this collection letter scheme and not necessarily be bound by this form. Some credit managers may desire additional columns for inserting the dates on which each of a series of follow-up forms or letters are sent. Others will use a special series of sheets for classifying the overdue accounts, and thus keeping together those which are but one month overdue, those containing items 2 and 3 months overdue, etc.

Customers' Statements and Collection Requests.—Fig. 16 shows the first of a series of condensed customers' statements and collection requests; this is the beginning of the collection work which should follow the preparation of the collection sheets. These should be followed up by other similar forms varying only to the extent of change in the wording below the statement of the account. In all these follow-up forms the top half (in which is inserted the name, address and account number of the customer) is identical with the top half of the customer's original statement in that it provides for the customer returning this portion of the form with his remittance. It is necessary that this idea be continued through all the collection letters or notices where many accounts are handled, as it will simplify the handling of the remittances by the cashiers.

Collection of Instalment Accounts.—In the case of instalment accounts, it is usually desirable that the **whole status of a contract** be shown on the first of these collection notices. Figs. 17 and 18 show the first and second notices to be sent to delinquent customers under instalment contracts. All notices on instalment contracts should be of the special color decided upon for the instalment customers' statements and ledgers. Attention is directed to the fact that also in the instalment collection notices the top half thereof carries through the idea of the remittance slip to be returned by the customer with his remittance.

The consistent carrying out of fixed policies is an important element in proper functioning of a collections unit. The specific time to be allowed to elapse between the sending of the various collection forms should not only be decided upon in advance but the plan should not be departed from.

COLLECTION LETTERS Dated_____ 19_____

Acct No.	Name	No.	Street	Form No.	Total Due	Overdue	Month	Remarks

FIG. 15. Collection Sheet for Listing Overdue Accounts Receivable and Noting Collection Letters and Other Current Efforts of the Collection Unit

Field Collectors.—After the mail efforts at collection have been exhausted without success, resort should be had to the use of the field collectors of this unit. The analyzed data covering these unsatisfactory accounts should at this time be transcribed on a collector's card similar in form to that shown by Figs. 19a and 19b. The numbers along the top of this card represent days of the month for the purpose of affixing metal tabs (two colors to be used alternately for current month and next succeeding month) to indicate the next date on which the collector is to follow up his last previous contact with the customer.

These cards should be filed alphabetically in a file for each collector. Control is had over all the cards by listing on a separate control sheet all of the accounts assigned to the same collector. The office supervisor of these collectors should use such a control sheet for his own guidance; he can get up-to-date information by providing a separate "current" index card in each collector's box behind which the collector can place all the cards which he has used during the day for making calls, and on the rear of which he has noted the results of his visit. The dividing of a metropolitan area into collection districts and the

ingenuity of each collector in arranging his calls for each day are factors in keeping down the collection cost and improving the efficiency of the collectors.

The office supervisor of the field collectors should have considerable latitude in determining how far the collectors' efforts should be continued and when the time has arrived for turning individual accounts over to attorneys; before the latter is done, however, the authority of the credit manager should be secured.

The X. Y. Z. Co.

Detroit

Tear Off This Slip and Enclose with Your Check to Assure Proper Credit Being Given. Your Cancelled Check When Returned by Your Bank Is a Valid Receipt. Accounts Are Due the First of Each Month.

This is a memorandum statement of your account.

Possibly you have sent us a remittance which we have not received, inasmuch as your account shows the above balance unpaid.

Will you kindly let us know if you have made payment of this amount, or, if it has been overlooked, perhaps you will find it convenient to send us a check at this time.

Very truly yours,

The X. Y. Z. Company.

FIG. 16. Customer's Statement and Collection Request

This is the first of a series sent at intervals. While the wording varies on each form, the top half in all cases is identical with the top half of the customer's original statement; it permits the customer to detach this portion and mail it with his remittance.

Co-ordination of Credit and Collection Policies.—It would be a good thing for all organizations whether they use this system or not, to the policy of bringing to the attention of the credit manager all overdue accounts above a fixed maximum amount which show unsatisfactory remittances or none what-

ever after the mailing of a certain number of collection notices or letters. It might be well to make such regulations that at several points during the collection process accounts will come up for decision as to the discontinuance of further credit on current purchases. Customers with debit balances of over

The X. Y. Z. Co.

Detroit

_____ 192___

TEAR OFF THIS SLIP AND ENCLOSE WITH YOUR CHECK TO ASSURE PROPER CREDIT BEING GIVEN. YOUR CANCELLED CHECK WHEN RETURNED BY YOUR BANK IS A VALID RECEIPT.

1924 **The X. Y. Z. Co.**

		Total amount of Contract		
		Total amount paid to date		
		Balance		
		To payment due		

PAYMENTS MUST BE MADE IN ACCORDANCE WITH TERMS OF CONTRACT

FIG. 17. First Collection Notice to Instalment Customers

It is desirable in the first of such follow-up collection notices to show the total amount of the contract, the aggregate payments to date and the unpaid contract balance, as well as the instalment which is overdue.

$250 who do not respond to two collection notices may require earlier and different consideration than others with balances of one-tenth of that amount who do answer and request just a little more time.

Not less important than the collection of overdue accounts is the prompt discontinuance of current credit when customers are no longer entitled thereto.

The collection department's co-operation with the credit department by keeping the latter informed currently as to unsatisfactory developments in individual customers' cases is a vital factor in the conduct of a successful business.

Control of Accounts Transferred to Attorney for Collection.—When an account is turned over to an attorney for collection it should be transferred to

The X. Y. Z. Co.

Detroit

_____ 192____

TEAR OFF THIS SLIP AND ENCLOSE WITH YOUR CHECK TO ASSURE PROPER CREDIT BEING GIVEN YOUR CANCELLED CHECK WHEN RETURNED BY YOUR BANK IS A VALID RECEIPT.

SECOND NOTICE

We have not received a response to our previous request for payment on your contract account.

The amount now due is $_____. Will you kindly favor us with remittance in the next mail?

The X. Y. Z. Company.

FIG. 18. Second Notice to Instalment Customers
This need not repeat the financial summary of the contract.

a separate controlling account in the general ledger; if more than one attorney or collection agency is used, a separate account should be maintained for each such agency; if there are many of them (which may be the case in concerns doing a national business) a separate subsidiary ledger for all such accounts might be useful, keeping the customers' ledger sheets for the same collection house arranged alphabetically between indexed separator leaves. A properly indexed card ledger might also answer this purpose.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

NAME DATE

ADDRESS FILE NO.

	DEBIT		CREDIT			DEBIT		CREDIT			DEBIT		CREDIT	
JAN					MAY					SEPT.				
FEB.					JUNE					OCT.				
MAR					JULY					NOV.				
APR					AUG.					DEC.				

BUSINESS	RES PHONE	TOTAL AMT.
BUS. ADDRESS		BUS PHONE
LETTERS	TO COLLECTOR	TO ATTYS.
SIGNED		CRED MGR.

(*Face*)

CALLS	PROMISES	PAID		BALANCE		

REMARKS

(*Reverse*)

FIGS. 19a and 19b. Field Collector's Card

Metal tabs of different color are attached to the top of the card to indicate the day on which the collector should make his next visit. The analysis of the account gives the collector full information. Pertinent data is entered currently on the reverse side. After each visit the card is returned to the office by the collector.

Collection of Out-of-Town Delinquent Accounts.—Out-of-town delinquent accounts can be handled along the same general lines as city accounts, as in both cases alphabetically arranged customers' correspondence files must be kept in the collections unit. The use of traveling salesmen for calling on customers while out in their territories and of out-of-town collection agencies need not change the general method, as copies of all data in connection therewith can be kept in the correspondence files. For follow-up purposes the collectors' cards may be used and kept in a separate out-of-town file; if this is done, the clipping of the left-hand top corner of each card will prevent their being filed in any city collector's box.

Collectors' Receipt Forms.—If consecutively numbered receipt forms are used by collectors, they should be so designed that blank numbered sheets will serve as duplicates and remain in a bound book for retention by the collector until after a book of receipts has been completely used, when the duplicates should be left with the collections unit as a permanent reference record. A Daily Collection Report scheduling the collections in detail should be prepared by each collector which should be turned in to the office cashier with the cash collected. In some cases it might be advisable to provide that all of the collector's receipt duplicates also be turned in to the office cashier daily with the cash, so as to simplify subsequent posting to the customers' accounts. In such cases, the receipt forms should be as similar as possible to the top half of the customer's original statement; the reason for this will be obvious when reading the outline of the cashier's procedure.

INCOMING MAIL RECEIPTS.—The incoming mail usually brings with it checks, currency and post office and express money orders for open account, for payment of C. O. D.'s and for orders paid for in advance of shipment.

Procedure for Identifying C. O. D. Remittances.—In the case of C. O. D. remittances through express companies, the data with respect to the origin of remittance, C. O. D. serial number, etc., will usually appear on the rear of the envelope. Since these data are important in current bookkeeping, it will be necessary for the mailing room to securely fasten the C. O. D. express envelopes to the back of the express money orders. It is also good practice to securely attach to correspondence and remittances all envelopes sent by registered mail. In every case where a remittance slip, letter or other enclosure accompanies a remittance, the enclosure and the remittance should be securely fastened together.

Subdividing Types of Remittances.—When arranging for orderly opening and sorting of mail, provision should be made for sorting into separate piles: (1) express orders in C. O. D. envelopes, (2) money orders bearing C. O. D. serial numbers, (3) remittances accompanied by the regular remittance form at the top of the monthly statement, (4) those not accompanied by the remittance form but by other data, and (5) those not accompanied by either statement or letter. Group (3) may in turn be subdivided into express orders, money orders and other forms of remittances. This plan will facilitate the separate handling of each of these groups.

Receipts Without Regular Remittance Slips.—Wherever correspondence or data other than the regular remittance slips accompany remittances, the amount of the remittance should be shown in heavy blue pencil on the letter or other data in a place provided by a rubber stamp impression setting forth the various kinds of remittances with a line for inserting an amount to the right of each designation.

Delivery of Mail Receipts to Cashier's Department.—All of the remittances and accompanying remittance slips and correspondence should, after having gone through the mailing department as above set forth, be delivered to the cashier's department. Where the quantity of work justifies it, one or more mail cashiers may be designated to handle these remittances to the exclusion of other work. In some cases the practice has been adopted of scheduling the remittances in the mailing department, but in actual practice it has been found that this very materially interferes with the quick handling of the current business and does not actually prevent theft.

Treatment of Remittances with Orders.—If a business is not conducted entirely on a cash in advance basis, remittances with orders can best be handled by treating them in the same manner as remittances from regular charge customers and opening up ledger accounts with such customers. Care should be taken, however, not to overlook the importance of having the credit department pass upon such new accounts notwithstanding the fact that the original business done may have been on a cash in advance basis.

In the case of entirely cash in advance merchandising businesses, such as mail order houses, it will not be necessary to keep accounts receivable ledgers. Provision, however, must be made for giving consecutive order numbers to all incoming orders as soon as received and prior to the handling of the remittances. The records in all departments of the institution, including the accounting, will thereafter refer to the remittances and shipments by order number and not by customer's names.

OFFICE CASHIERS—LARGE CONCERNS.—

C. O. D. Return Envelopes Receipts and Orders.—The handling of C. O. D. express remittances will be simplified if at the time of making a C. O. D. shipment a self-addressed return envelope accompanies the C. O. D. papers on which has been previously typewritten the invoice number, amount of C. O. D. and the consignee's name and address. The majority of the incoming C. O. D. express orders will be received in such return envelopes. Where such remittances are enclosed in other envelopes, the reference data will have to be supplied by the collections unit.

Recording C. O. D. Receipt Sheets.—All C. O. D. express orders and C. O. D. money orders should be delivered by the mailing room to the cashier's department where they should be scheduled on two separate series of consecutively numbered sheets used solely for this purpose. These sheets will form a subsidiary cash receipt book in so far as concerns C. O. D. express orders and C. O. D. money orders; they should show the number of the express or money order, the C. O. D. number and the amount of each remittance. The total of the sheets used for each day's collections of this nature should be entered in the general cash receipt book to the credit of the C. O. D. Accounts Receivable controlling account.

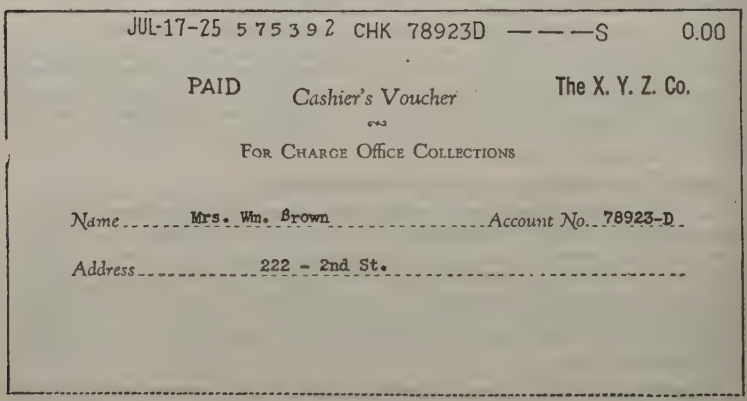
Use of Duplicate C. O. D. Receipt Sheets.—If the subsidiary C. O. D. express and money order cash receipt sheets are written up in duplicate, a great deal of clerical labor can be saved by using the duplicates as detailed bank deposit slips.

Posting C. O. D. Receipts.—The detailed C. O. D. subsidiary cash sheets should then go to the accounts receivable unit for posting to the credit of the individual accounts in the C. O. D. ledger consisting of the previously alphabetically arranged duplicates of the C. O. D. invoices. If, to enable distribution of sales to be made to various classified sales accounts, a **Columnar Sales Sum-**

mary is maintained separately for C. O. D. sales, it may be found convenient to dispense with using the duplicate C. O. D. invoices as a C. O. D. ledger and to use this C. O. D. sale summary as such C. O. D. ledger. This can be accomplished if the C. O. D. invoices are listed in consecutive order on such summary and the column covering the total of each invoice is immediately followed by another column for posting the dates on which the C. O. D. remittances are received.

Use of Cash Register in C. O. D. Receipts.—If a system is in use whereby the office cashiers use a cash register machine through which all receipts must be put, the total of these detailed C. O. D. subsidiary cash receipt sheets can be put through the cashier's machine at the end of each day as separate items, instead of being entered directly in the general cash receipt book.

Use of Cash Register to Control Miscellaneous Receipts.—Where large quantities of receipt items are handled through office cashiers, a simple and practical method of handling them is to require all remittance


JUL-17-25 575392 CHK 78923D ———S 0.00

PAID *Cashier's Voucher* The X. Y. Z. Co.

FOR CHARGE OFFICE COLLECTIONS

Name Mrs. Wm. Brown *Account No.* 78923-D

Address 222 - 2nd St.

FIG. 20a. Office Cashier's Voucher for Office Collection from Charge Customer

data to pass through cash registering machines with which each cashier is equipped. Such cash registers can be provided as will stamp each remittance memorandum with the date of receipt, a consecutive receipt number, an identifying abbreviation setting forth whether the remittance is cheque, cash, money order, etc., customer's account number, a cashier's letter and the amount of the remittance. A sample of the impression of such a cash register in actual use is shown at the top of Fig. 20. Such a register should, of course, have provision not only for recording the individual receipt items but also for registering the aggregate of the daily receipts; this total will form the basis for a daily general cash receipt book entry covering the total receipts of each cashier. The consecutively numbered individual remittance slips then go to the accounts receivable unit for posting to the credit of the individual customers' accounts.

Advantages of Using Duplicate Roll in Cash Register.—In this connection, it is important to bear in mind that a duplicate roll on the registers can be provided on which is shown all of the data stamped on each remittance slip; this roll will form a consecutive detailed register of the receipts (practically a

subsidiary cash receipt record) setting forth each customer's account number and the amount received. If posting machines are used in the accounts receivable unit for posting the individual remittance slips to the credit of the customers' accounts, and if the totals of such postings as set forth on the posting machines' adding mechanism are proved currently (once or oftener each day) against the totals shown by each cashier's register, the necessity for checking back the individual account postings against the duplicate register rolls will be entirely eliminated.

JUL-17-25 575392 CHK 78923D ——— —S 0.00

PAID The X. Y. Z. Co.

The X. Y. Z. Co.

Begs to acknowledge with thanks the above remittance:

Name Mrs. Wm. Brown *Account No.* 78923-D

Address 222 - 2nd St.

Please present your monthly statement when making payments. It will save time for you and assist us to keep your account accurately.

FIG. 20b. Customer's Receipt for Office Collection Applying to Customer's Charge Account

Figs. 20a and 20b are put through the cashier's cash register which stamps the data shown at the top of both forms. Fig. 20a goes to the accounts receivable unit for posting to credit of the customer's account. These forms are printed on one sheet with perforated separator line. Both forms are filled out in one writing by the use of carbon paper.

Handling Regular Remittances.—In cases where the mail receipts are accompanied by the regular remittance forms which comprise the top of the customers' monthly statements, the checks and the remittance forms should be at once delivered by the mailing department to the cashiers who should take charge of the cash and put the remittance forms through the registers prior to sending them to the bookkeepers in the accounts receivable unit.

Remittance Slips.—Remittance slips in form exactly similar to the top of the customer's monthly statement should be prepared for remittances from

customers which were not accompanied by such forms. Because of absence of sufficient data, accompanying the remittances, it may be necessary to send the checks to the accounts receivable unit or collections unit for the preparation of these slips; the slips should be already prepared, however, at the time the checks are handed to the cashiers.

Remittance slips must be similarly prepared for receipts accompanied solely by letters; after the preparation of such slips the letters and other data can be sent to the various departments interested in the matters referred to in the correspondence.

Cashier's Voucher.—A cashier's voucher for office collections is shown in Figs. 20a and 20b, the latter being prepared at the same time as Fig. 20a by the use of a carbon sheet. These forms cover payments in the office by charge customers; they may be prepared in the collections unit or by the cashier at the time of receiving the remittance; after they both are passed through the cashiers' machines Fig. 20b is handed to the customer while Fig. 20a goes to the accounts receivable unit for posting to the credit of the customer's account.

Receipts from Sources other than Customers.—What has been said above refers almost entirely to receipts from customers. In cases where all other receipts go through the same cashiers, it will be necessary for the subsequent guidance of the bookkeepers to make out register remittance slips setting forth in detail the nature of the items and the ledger accounts to which they should be credited. Since such slips must be posted directly to the proper accounts, it will necessary to distribute them separately on the general cash receipt book and deduct them from the total of the cashiers' receipts before crediting the latter to the Accounts Receivable controlling account.

In most cases it will probably be found undesirable to have the office cashiers who take in customers' remittances also handle proceeds from loans, payments of notes receivable and other miscellaneous receipts. Where this is the case such sundry receipts should go direct to the general accounting department for entry in the general cash receipt book.

Definite Hour for Closing Business Day in Cashier's Unit.—A specific time should be decided upon for the arbitrary closing of each day's business in the cashier's unit. Such a time might be set as will permit all receipts prior thereto to be deposited in bank. All the cash register machines should then be set to stamp all subsequent receipts as applying on the next day's business. **Internal check on the cashiers** should be provided by a representative of the general accounting department taking a daily record of the accumulated receipt totals on each cashier's register at the time he takes the checks and cash and gives the cashier a receipt therefor in a bound receipt book in the custody of each cashier. The general accounting department (or auditing department if a separate one is maintained) alone should have the key to the cashiers' registers with which the totaling mechanism can be cleared. The clearing of the registers should be done at the time of daily settlement; if inconvenient to have the auditing department clear all registers daily, the accounting department can make daily cash settlements with each cashier only by providing for daily readings of the total collections to the close of each day from the date of the last previous clearance.

OFFICE CASHIERS—SMALLER CONCERNS.—

Use of Cash Receipt Books.—Where the size of the business does not warrant expenditure for cash registering machines, all remittances will go direct to an office cashier (whose duties may involve keeping of other records also) who must keep a cash received book and enter all items therein in detail. There

is no reason why such a cash received book should not be in loose-leaf form, as it will facilitate keeping the work up to date by sending the consecutively numbered sheets to the ledger posting clerks as fast as they are filled with receipt entries.

Control of Various Types of Receipts.—Where the volume of entries justifies it, one or more series of subsidiary cash receipt sheets may be used for separate entry of one or more classes of customers' accounts, such as cash sales, C. O. D.'s, instalment accounts and regular charge accounts. Columnar distribution columns for each controlling account may be used on the cash receipt sheets if it is desired to use only one consecutively numbered series of such sheets.

CASH SALES.—Pages 311 to 312, dealing with "Cash Sales," should be carefully read as they outline the detailed procedure of handling sales of this nature in large mercantile establishments.

Disposition of Daily Receipts from Cash Sales.—At the close of each day the various departmental cashiers assigned solely to the handling of proceeds from cash sales should turn over their cash and summaries to the head cashier or direct to the general accounting department; if to a head cashier, the latter will of course make daily settlement with the general accounting department. The totals shown on the summaries should then be entered on the general cash receipt book and the cash included in the daily bank deposit. The various cashiers' summaries will, of course, be checked by the auditing department in the manner set forth in the outline of procedure previously referred to.

Use of Cash Registers for Cash Sales.—In comparatively small organizations, the use of cash registers with a change drawer beneath may provide the most satisfactory and simplest method for handling over-the-counter cash sales. Such registers may be provided as will dispense cash tickets from a tape or as will imprint the sales figures on separate sales slips prepared by sales clerks. The totaling mechanism on such a register will show the total cash sales for which cash must be turned in to the accounting department at the close of each day. A representative of the general accounting department, or the auditor, should have sole possession of the key with which to clear the machine after each settlement period.

Use of Autograph Registers for Cash and Charge Sales.—Autograph registers for the preparation of sales slips are sometimes used in medium-sized or small establishments where there are several salesmen and one separate cashier. Sales forms for use on autograph registers may be had in duplicate, triplicate or even quadruplicate. Some registers provide for the last copy rolling up inside the machine to form a current daily sales register, while the other copies may be torn off and one copy delivered to the customer, another sent with the cash to the cashier and still a third used for any other internal general or cost accounting purpose which may be desired. It is usually desirable to have at least two of such registers, one for cash sales and the other for charge sales; in the case of charge sales, the copy which would ordinarily go to the cashier with cash should go to the accounting department for charge against the customers' accounts.

Cashier's Receipts in Places of Amusement.—Supervision may be had over cashiers in places of amusement where tickets are sold for one price from rolls, by noting the consecutive numbers of the first tickets on the rolls at the beginning of each day's business and requiring the cashiers to settle daily in cash in an amount equivalent to the sales value of the number of tickets sold off the rolls during the day. In amusement houses where seats are sold at varying prices, the ticket cashiers should be required to account in cash or unsold tickets

or proper authorizations for complimentary passes (with detached portion of tickets covering seats used) for the cash value of all of the seats at each performance; while this entails some detailed checking it is not really a complex procedure as the number of seats in each section and the sales value thereof for each performance is a known factor. Receipts can be entered one or more times daily in a cashier's settlement book and audit made at longer intervals, if desired.

Cashier's Receipts in Restaurants.—In restaurants the use of customers' consecutively numbered price tickets all emanating from one source or various series of consecutively numbered waiters' orders, form the basis of control over the cash receipts. Audit should be provided so that each day all of the consecutively numbered checks are accounted for by the cashier covering the numbers issued since the record made at the beginning of each day of the first unused number in each series. Audit of the waiters' individual detailed orders, to prevent minor peculations, may also be provided. Of course, the daily summarizing of all tickets on adding machines is necessary as a check upon the correctness of the total cash settlement by the cashier.

EDUCATIONAL AND CHARITABLE INSTITUTIONS.—The business of educational institutions may be handled in much the same manner as that of mercantile houses; that is, the rendering of bills for tuition, books, etc., and the

OFFICIAL RECEIPT No. D 159395

Nat'l Chairman
Gen'l Sec'y
Nat'l Treas.

NEIGHBORHOOD RELIEF

National Headquarters
Fifth Ave.
New York City

Date August 9–1924 Amount: 50.00

Mr. John Doe,
1317 Bewick Ave.,
Detroit, Mich.

Payment on Pledge

We gratefully acknowledge receipt of your kind remittance as indicated above.

STATE OFFICE
1106 Stroh Bldg., Detroit, Mich.

NEIGHBORHOOD RELIEF A–3

Per E. Brown D

FIG. 21. Receipt for Charity Donation

Note the consecutive receipt number, which should be used in making cash receipt book entries, and which indicates to the donor that donations are being handled in a systematic manner.

treating of debtors' accounts as regular accounts receivable. The same thing is true with respect to bills actually rendered by hospitals. Such handling of the business of these institutions also enables an invoice summary to be used as the medium for distributing the various classes of income.

The confidence of donors to charitable organizations is strengthened if instead of acknowledging remittances solely by letter or correspondenec card,

consecutively numbered receipts are used. These should be prepared in duplicate and the latter filed numerically for reference, while the receipt number itself suffices for identifying the daily cash receipt book entries covering donations.

Fig. 21 shows a suggested form of such consecutively numbered receipts for use by charities. If desired, a list of the various funds can be printed on the form in cases where one charitable organization handles more than one fund. In such cases, a columnar cash receipt book should be used for classifying the receipts.

Handling the Cash

GENERAL CONSIDERATIONS.—Checks, express orders, money orders, currency, stamps, notes and acceptances receivable, sight drafts and time drafts are all in the nature of receipts; they are not all, however, cash receipts nor equally available as current funds.

Items Treated as Cash Receipts.—Checks, express and money orders, currency and stamps should all be handled as cash receipts through office cashiers.

Stamps.—Stamps should be exchanged by office cashiers for currency through the medium of the imprest petty cash fund. The cashier of the latter fund can from time to time deliver the stamps to the mailing department and secure that department's receipt on an imprest petty cash voucher for the cash value of the stamps turned over. If the amount of stamps received daily is large, a check can be drawn reimbursing the office cashier for the amount of the stamps or they can be handled by a daily charging of the postage account in a separate column on the general cash receipt book.

Procedure in Handling Notes and Acceptances Receivable.—Notes and acceptances receivable should not be handled through cashiers but should first go to the credit department for approval and then to the general accounting department, where they should be immediately entered on the notes and acceptances receivable records and credited to the customers' accounts.

Procedure in Handling Sight Drafts and Time Drafts Receivable.—Sight drafts and time drafts receivable will originate in the general accounting or collections department; they will not be handled by the office cashiers at the time of issuance, but be placed with banks for collection. The proceeds from the sight drafts or any discounted time drafts may be entered in the general cash receipt book by the general accounting department if they are handled directly with the banks and the proceeds entered on the bank deposit book as separate deposits from the regular current receipts through the office cashiers' unit.

If, however, the practice is adopted of requiring all incoming funds to be handled through office cashiers along the lines hereinbefore detailed, it will be necessary to prepare separate remittance slips showing the details of the proceeds from sight drafts and time drafts, as they come under the head of miscellaneous receipts, of which the bookkeepers must have details in order to make proper postings.

If the major portion of the business is done on a sight draft basis, the simplest method of handling this business is to treat the debtors' accounts as ordinary accounts receivable until the sight drafts are actually paid, and when recording the payments of the drafts in the general cash receipt book (or separate subsidiary sight draft cash receipt sheets) to make a memorandum for reference

purposes of the numbers of the drafts paid. The copies of the unpaid drafts may be arranged alphabetically to form the office record of the drafts still in process of collection.

CASHIER.—The decision as to whether a cashier's position should be filled by a man or a woman will naturally be based upon the volume of work and the extent of the exposure to possible hold-ups. Women cashiers may be desirable for handling mail receipts, but it will probably be found more practicable to use men where the public has access to the cashiers' windows either for making remittances or for securing disbursements. There are, however, exceptions to all rules.

Cashier's Qualifications.—Cashiers must be careful and accurate; therefore, in examining applicants for a cashier's position, no one should be considered who is slovenly in dress or apparently nervous in disposition. Let the applicant write a letter in his own handwriting and do not employ applicants whose handwriting is not clear and readily legible, as errors in the bookkeeping departments are often due to poor figures made by a cashier.

In mercantile establishments and public service corporations particularly, an office cashier is often the most important point of contact between the institution and the public. If the cashier is impatient or discourteous much good will is lost. A little more attention than usual should therefore be given to investigating applicants with regard to their ability to get along with others at previous places of employment and to their general disposition.

References and Bonds.—Letters of recommendation are often given to permit an old but unsatisfactory employe to make a new connection. Too much weight, therefore, should not be attached to such letters, and references should be required from others than previous employers of an applicant. Without exception, every applicant who is accepted for a cashier's position should be placed under bond, even though the amount of the bond be nominal, as the investigation made by bonding companies has often disclosed facts not brought out by individual efforts.

Understanding of Double Entry Bookkeeping.—Since at times customers not only take discounts but deduct contra accounts and claims not yet allowed, a cashier who understands something about double entry bookkeeping will be in much better position to handle such settlements intelligently than one who does not have that knowledge. Except in public service corporations, theatres, department stores and such institutions as have cashiers solely to take care of customers making payments on account or in full, it is almost imperative that cashiers understand double entry bookkeeping.

THE CASHIER'S DUTIES.—The financial manager should have absolute knowledge of the nature of the transactions to be handled by the cashiers and should see to it that the cashiers' duties are properly laid out and covered by written instructions and that appropriate forms are used where records are necessary. Detailed reference has hereinbefore been made covering the methods of recording the receipts by cashiers.

One of the greatest helps to the cashier is **proper equipment.** Where currency alone is received, a properly partitioned cash drawer will facilitate the making of change. Where the incoming receipts consist of items other than cash, additional divided drawer space will be desirable for separating the checks, money orders, etc.: this will simplify the preparation of the bank deposit slip.

Department stores and other very large establishments usually have **adjustment departments** to which cashiers can send customers to adjust com-

plaints over differences in their accounts. Such an adjustment department will enable cashiers to confine their duties solely to receiving cash and recording it as a credit to the customer's account without noting any other complicating features in connection therewith.

Except in very small organizations where the cashier is also the bookkeepers, a cashier should not have access to any of the accounting records of the company. He should not be permitted to make any journal entries or in fact any bookkeeping entries other than those on his own current cashier's detailed receipt records. He should send customers to the adjustment department or the accounts receivable unit when questions arise with respect to their accounts.

The **cashier's records and duties** should be so planned by the financial manager that at a specific time each day the cashier can turn over his records to the general accounting department and deliver to the latter the checks and currency with bank deposit slips ready to make the deposit covering the daily receipts up to the settlement time. The cashier is entitled to have a receipt book in which a representative of the general accounting department receipts each day for the amount turned over.

INTERNAL CHECK ON CASHIERS.—Where cash register machines are used by cashiers handling incoming receipts and where posting machines are used for posting to the accounts receivable accounts, all as hereinbefore outlined, the daily checking of the total of the postings to the customers' accounts against the cash register totals, and the checking of the bank deposits against the total of the cash registers, will comprise a good internal check upon the correctness of the cashiers' work. Where such cash registers are not used, or posting to customers' accounts is done by hand, it will be desirable each day for the bookkeepers to verify the correctness of the footings of the cashiers' detailed cash receipt sheets turned over to them for posting and for a specially designated clerk in the general accounting department to compare the totals thereof with the daily bank deposits.

Cashiers Should Not Have Access to Customers' Statements.—No cashier should have anything to do with the preparation or mailing of the customers' statements and he should not be permitted to scrutinize them or to recommend that any be delayed, that any be not sent or be sent to a different address. If he should make any such suggestions it would be well to have the financial manager or auditor investigate and verify by direct contact with the customer the correctness of the accounts covered by such statements in which the cashier appears to be particularly interested.

Independent Investigation of Customers' Complaints.—It is important also that all customers' **complaints as to overcharges or errors in statements,** particularly those forming the subject of correspondence, be handled in the first instance in the general accounting department either through an adjustment unit, accounts receivable unit or collections unit, in such manner as to permit investigation without the cashier's knowledge; thefts by dishonest cashiers have been unearthed by the investigation of outside complaints proceeding without knowledge thereof on the part of the cashier.

HANDLING OF SECURITY DEPOSITS.—Gas, electric light and other public service corporations nearly always require security deposits from their customers. A good control can be had over such deposits by providing for the issuance of a special form of consecutively numbered **deposit receipt** to cover them and to record this receipt number in the client's ledger account for reference. (It may also follow the customer's name on an addressograph stencil where such stencils are used for the preparation of ledger headings and

invoices.) This plan does away with the necessity for keeping a separate alphabetical index of such deposits; it also enables a separate subsidiary deposit ledger to be kept in the form of a columnar register in which each deposit receipt is consecutively recorded showing the name of the customer, the date and amount of deposit and the date repaid; such separate deposit ledger should of course be covered by its own controlling account.

Cash Deposits against Purchases, Rentals and Similar Items.—Deposits on account of merchandise purchased under contracts, rentals paid in advance and items of similar nature, should either be treaded as **credits direct** to accounts receivable against which deliveries are subsequently charged, or should be credited to separate deposit accounts with these customers. The determining factor as to which method should be used should be the length of time which is expected to elapse between the time of the deposit and the dates on which purchases are made which should absorb part or all of such deposit.

Cash Deposits Against Instalment Deliveries under Contract.—If deposits are made on account of contracts which require current delivery of merchandise or securities in instalments over a long period of time, separate deposit accounts should be carried and transfers made to the current accounts receivable account for the proper share of such deposits as actual deliveries are made and charged currently to the customer.

Deposits under Building Contracts.—In cases of building contracts where customers make payments on account at specific intervals during the progress of construction, such receipts should be credited direct to the customers' accounts. It is good practice to actually bill the customer at various times during the construction period for the share of the work completed up to the time of billing in accordance with the contract, and at inventory periods to take into inventory only such value of the work which has been performed in excess of the portion already billed.

In the case of **securities purchased on margin or instalment payment basis,** the customer's deposit should be credited directly to his account and the customer charged for the securities purchased for his account.

Deposits on account of **building and loan association shares** should be treated exactly the same as savings fund deposits, viz., credited direct to accounts with each shareholder or savings fund deposit account. Separate accounts will, of course, be necessary for shares of each series, and for each savings account.

RECEIPTS NOT DEPOSITED IN BANKS.—It has been previously suggested that a fixed time be decided upon when the cashiers should settle daily for their receipts and make bank deposits. There will be other receipts for the balance of each day which will be treated as receipts for the following day; notwithstanding this, however, it is good practise at the actual closing of each day to require cashiers to turn over to the head cashier or the general accounting department all such actual receipts not deposited. This will enable all of the undeposited receipts to be gathered together and put into one place in the vault for safe keeping over night and will also enable a deposit to be made early the next morning covering such subsequent receipts, in cases where the volume of business is better handled by making two daily deposits than one.

Control of Undeposited Receipts.—A good check upon the undeposited receipts at the close of each day would be for a representative of the general accounting department to read the cashier's register counter figures, and, if the machines were cleared at the time of settlement earlier in the day, to compare the new figures with the undeposited receipts turned over; in cases where

the cash register was not cleared earlier in the day the difference between the register reading at such settlement period and the reading at the actual close of the day would represent the amount of the undeposited receipts which should be turned over by the cashier.

Daily Report to Treasurer of Undeposited Receipts.—Report to the treasurer at the close of each day of the amount of such undeposited receipts will give him some idea as to the amount of cash which he can count on in addition to the actual bank balances; this could be accomplished by the use of a single line memorandum added to the daily financial report (Fig. 6, pages 301, 302).

BANK ACCOUNTS.—

Authority for Opening Bank Accounts and for Signing Checks and Notes Payable.—Resolutions by the board of directors should be the authority in the case of corporations for the opening of bank accounts. Such resolutions should not only name the bank, but should also specify the number of signatures to be required on checks and on endorsements of notes and other negotiable paper which may be handled through the bank. They should specify the names and positions of the parties whose signatures should be required on each kind of paper. Thus, while the financial manager and auditor might suffice for the signing of checks on regular bank accounts, the signature of the treasurer, or another executive officer, should always be one of those required on all notes payable for borrowed money. The signature of the financial manager should be one of those required upon all notes payable, to insure their being entered upon the books at time of issuance. In certain cases, paymasters' signatures alone might be quite sufficient for individual pay roll checks which are limited to a maximum amount engraved on the face of each check, provided proper internal check is had on methods of time keeping and pay roll preparation.

Special Bank Accounts for Signed Blank Checks for Special Purposes.—Occasionally in actual experience it has been found that certain customers doing a large business on a sight draft with bill of lading basis have, by reason of short distances and mail delays, preferred to leave with manufactuers signed checks drawn to the order of the manufacturer but blank as to amount; the purpose was to insure the bills of lading for the shipments reaching the short distance customer coincident with the arrival of the goods, which might not be the case when the usual methods of bank collections by mail were used; another reason was to enable the customer to order the manufacturer to deliver merchandise at the factory to his representative upon presentation of written order. Wherever such a practice is in use, it would be wise for the customer to open a special account with his bank and require the manufacturer's financial manager to countersign such blank checks.

All Receipts Should be Deposited Daily.—Irrespective of amount, all receipts should be deposited in bank daily. Under no consideration should any portion of the receipts be paid out in cash, as one of the best checks upon the correctness of the cashiers is the checking of the bank deposits against the cashiers' records. To accomplish this, however, it will be necessary to treat each day as finished, in so far as concerns the cashiers' records, at the time the daily deposit slip is prepared.

Local Receipts to be Deposited in One Local Bank.—It will simplify actual banking practice if all local receipts are deposited in one local bank daily and transfers made to other banks as may be desired to equalize bank balances. It will also simplify the work if all of one day's checks are drawn on one out-

of-town bank and one local bank; exceptions can be made, however, in cases where unusually large payments are necessary to single creditors.

BANK ACCOUNTS IN CASH BOOKS.—A separate column for each bank account may be kept in both cash receipt book and check register. Where only one or two bank accounts are kept, this is a simple matter, but where a considerable number of bank accounts are kept, one bank column will suffice on both the cash receipt book and check register for recording all bank transactions. The allocation of the actual deposits and checks to each bank should then be kept on the back of the condensed daily financial report shown in Fig. 6b (page 302). Where this is done, the total of the day's checks and deposits as shown on this report must agree with the totals entered in the single bank column in the cash receipt book and check register.

Another suggestion would be to use separate series of check register sheets for each bank with memorandum columns for entering the daily deposits, the total checks drawn and the bank balances.

TRANSFERS BETWEEN BANKS.—In order that the cash receipt book and check register totals do not show inflated receipts and payments, due to transfers being made from one bank to another, all such transactions should be entered in the cash receipt book only, in black ink in the column for the bank in which the deposit is made and in red ink in the column for the bank from which the funds are withdrawn. In the check register, the check number can be recorded and a memorandum made to the effect that the check has been used for transfer.

In cases where the transfer is between banks in different cities, it is not sufficient simply to make the transfer in the cash receipt book, but the requirement should be set that the acknowledgment of the receipt of the remittance by the depository bank should be noted alongside each cash book entry with the date of the acknowledgment and initials of the clerk delegated to follow these up. The cash receipt book should be scrutinized every few days by a separately delegated party, or the auditor, to check up to see that no unusual length of time elapses between the actual remittance and the bank acknowledgment.

In cases where the back of the daily financial report only is used for keeping the totals of each bank's transactions, the transfers need not be entered in the cash receipt book or check register; entry on the financial report and follow-up of acknowledgment therefrom will suffice.

VERIFICATION OF DEPOSITS.—The auditing department, or if none exists, a party specially designated for the purpose in the general accounting department who does not keep the cash receipt book, should check the deposits recorded in the various bank pass books against the receipts entered in the cash receipt book as having been so deposited. In cases where collections are reported by banks, detailed schedules of such collections will be issued by the banks. It is good practice for the auditing department or such other specially designated person to check these bank collection reports against the cash receipt book, in which the collections by each bank should be recorded separately, and the total extended to the bank deposit column.

RECONCILING BANK BALANCES.—Where only one or two bank accounts are kept and the bank balances are carried on the cash receipt book after closing each month's business, each bank's monthly statements should be reconciled with such cash receipt book balances. Usually, however, separate general ledger accounts are opened with each bank, and where this is done the balances as shown by the monthly bank statements should be reconciled with

such ledger balances immediately after the close of each month. Such a reconciliation should not be entrusted to any of the persons responsible for the keeping of the cash receipt book or the check register; this work should be performed either by a member of the auditing department or a specially designated clerk in the general accounting department.

Verification of Bank Reconciliations.—Banks usually send with their monthly statements a verification request covering the balances shown by their statements; such verification forms should be signed only **by the auditor or the financial manager.** If signed by the financial manager, he should require the production of the bank statements on which should be noted in ink the details of the reconciliation of such statement with the ledger account, which reconciliation in turn has been certified to by the specially designated clerk responsible for this work; it would not be objectionable for the financial manager to occasionally require another disinterested clerk to recheck such reconciliations.

SAFEGUARDING THE CASH.—Where contact is had with the public in large numbers, it not only reduces the risk of loss through hold-up, but facilitates the current work of the cashiers, if railings are installed in such a way as to require "one way traffic" to the cashier's cage. It is now possible to purchase unbreakable glass for cashiers' windows which cannot be penetrated by bullets. Systems of call bells and alarms operated by the cashier's toe or knee are also becoming more common.

Deposits should not only be kept in leather bags while en route to the bank but should be attached to the person of the clerk making the deposit by means of a leather-covered metal chain and deposits of any size should never be made by an unaccompanied clerk. Where the deposits are unusually large or consist of a good percentage of currency, the deposit clerk may be followed by an armed guard a short distance behind. If there is not much bulk to the combined currency and checks to be deposited it may be of some value in avoiding conspicuousness if the use of the leather covered bag is dispensed with.

All cashiers having petty cash funds or any quantities of stamps or any undeposited funds should be provided with **strong metal boxes** to which they alone have the key and arrangements should be made for their safe keeping overnight in a locked compartment in a vault.

Insurance Policies Covering Loss of Cash.—Insurance policies can be obtained indemnifying the assured against loss of cash. Great care should be exercised in the procuring of such policies, however, as insurance companies divide the risk into many classifications and insure against no class not specifically mentioned in the policy form. Some of these risk classifications are fidelity bonds (protection against employes' thefts) hold-up (usually covers pay roll or other robbery outside of assured's place of business only, unless specifically worded to also cover while cash is inside the plant) and burglary (which usually covers only while the cash is inside the office either during or after office hours). Many policies specify that the assured must provide certain protection with respect to number of armed guards, etc., and must limit transactions to certain hours; it therefore behooves each assured to read his policy carefully and to check up at least monthly to see that actual conditions and methods pertaining to the handling of the cash conform to the policy requirements.

DAILY REPORTS TO TREASURER.—Whether an institution is large or small, a **summary of all the receipts, payments and bank balances** should be in the hands of the treasurer daily. As the general accounting department is the one in which are concentrated all of the financial records, that department

should prepare this daily report. It should be the province of the financial manager to supervise the detailed handling of the receipts and disbursements and the banking in connection therewith, conforming, however, to the desires of the treasurer with respect to division of bank balances among the various banks.

The treasurer should be kept informed currently of the changing financial situation and receive copies of all cash budgets for future periods. Figs. 6a and 6b (pages 301, 302) show a condensed daily financial report form which may be used for reporting to the treasurer. The data on this report pertaining to cash transactions should be prepared from the general cash receipt book and the check registers.

Petty Cash

IMPREST PETTY CASH FUND.—A certain amount of actual currency is necessary in every office for the purpose of making change, cashing checks, advancing funds for traveling expenses, meeting express and C. O. D. charges and making urgent purchases of minor amount from concerns with whom current accounts have not yet been opened. The best way of meeting these requirement is to provide an imprest petty cash fund, and under no circumstances to permit the use of incoming receipts as petty cash; all incoming funds should be deposited in bank.

An imprest petty cash fund is a fund in the possession of the cashier which is always maintained at a fixed amount, expenditures from which are from time to time covered by check from the general funds upon the presentation of a summary of the expenditures accompanied by **proper vouchers** therefor.

Starting the Fund.—The fund is started by drawing a check to the order of the cashier for the predetermined amount of the fund and charging it to an "Imprest Petty Cash Fund" account which is allowed to remain open permanently on the general ledger. This account will, of course, be adjusted through cash book or check register entries for any increases or decreases in the fixed amount of the fund; reimbursements for expenditures from the fund should not be posted to this fund account, but direct to expense, asset or personal accounts, according to the nature of the individual items of payment. The cashier's signature should be secured to a special form of receipt for this fund, which clearly acknowledges his responsibility to account therefor. The proceeds of this check comprise the petty cash fund to be carried by the cashier.

The Amount of the Fund.—The **average currency requirements** should determine the amount at which the fund shall be fixed. It should be equivalent to a little in excess of the maximum amount of currency which may be required weekly. If that amount seems large compared with the risk of theft, the fund should be smaller, even to the point of being a trifle over each day's requirements. In actual practice, if the fund is too large, the misuse thereof is encouraged. If it is found that from 30 to 50% of the fund is never used, the amount of the fund should be cut down. In no case should it be used for any purpose where the firm's check in the regular course of business will answer.

HANDLING OF THE IMPREST FUND.—After becoming responsible for the fixed amount of currency represented by the imprest fund, the cashier to whom the fund is entrusted should be careful to make payments therefrom only upon proper authority and to secure a proper voucher for each payment. He should arrange for securing periodical reimbursement for such expenditures

from the fund upon delivering to the general accounting department a summary of the expenditures together with the vouchers therefor.

Written Authority for Every Payment.—In large organizations with many departments there will be many demands for currency. A good general rule to follow is to require a written authority for each payment, setting forth the amount and the reason therefor, signed by the head or assistant of the department in which the cause for the payment arises. There may be a few exceptions to this from time to time where a department head is absent temporarily and the circumstances of a payment are such as to make it clear to the cashier that the payment is in order. Even in such cases the petty cash voucher (Fig. 22) should later be approved by the department head. In small concerns it may be found more practicable to have some executive directly approve the petty cash vouchers at the time payment is made and thus dispense with the necessity for the written memoranda to the fund cashier.

IMPREST CASH VOUCHER

No. 43020

Detroit, Mich. July 14 1925

RECEIVED FROM X.Y.Z. CO. $ 200

Two Hundred no/100 DOLLARS

FOR Traveling Expenses

Charge Account Sdy Dr.

Entered on Summary No. 1115

Approved J.H.H.

Signed

W. L. Malloy

FIG. 22. Petty Cash Voucher

These vouchers should be signed by the recipients of the cash disbursed. All instructions to the cashier, or other authoritative data upon which payments are based, should be attached to the voucher.

Standardizing Petty Cash Transactions.—A cashier with ideas and initiative can standardize petty cash transactions and lighten his own work where he finds many items of the same nature going through his hands during comparatively short periods. He can design a small printed ticket for use by all departments in authorizing him to pay supper monies to specific employes; this ticket, of course, should be signed by the department head. Similarly, standard forms instructing the cashier to make advances for traveling expenses, to be signed by the department heads, may also be used. Standard forms, to be signed by the accounts payable unit head, instructing the cashier to make payments to creditors who collect bills of amounts too small to justify the issuing of checks, will also be helpful. As a general rule, however, it is more desirable to issue the company's checks to all creditors with claims in excess of five dollars.

Handling Transportation Expenses.—Where there is a **traffic department** and much traveling is done, it is practicable to have the necessary railroad tickets for all parties purchased through the traffic department and to have the **traffic manager** sign a requisition on the cashier each day setting forth the

X. Y. Z. Co.

No. 1115

IMPREST CASH SUMMARY

Date July 16, 1925

Contains Vouchers No. 43008 to No. 43020 $728.26

Approved by E. E. Stenk Paid by Check No. 3-1107

Genl. Acct.	ACCOUNT DEBITED	ACCT No. PC	AMOUNT
	R. E. Smith & Co.		8 50
	Cleaning Supplies Co.		9 50
151	Accts. Payable		18 -
	Advtg. Supplies	238	7 75
	Sales Car Expense	267	7 50
	Charges on Advtg. Matter	237	1 06
201	Commercial Exp. Ledger		11 31
	Purchasing Dept. Supplies	417	6 10
	Heat Treat. Dept. Expenses	515	4 60
200	Mfg. Expense Ledger		10 70
	E. H. Carpenter		163 30
	W. J. Smith		100 -
	A. L. Talley		175 -
	H. G. Malloy		200 -
	H. A. James		17 99
	J. H. Rees		31 96
26	Sundry Debtor Ledger		688 25
	Imprest Cash Fund Credit Total		728 26

FIG. 23a. Imprest Cash Summary

This summary is made in envelope form to permit the placing therein of all petty cash vouchers for payments made during the reimbursement period. The face of this summary sets forth the accounts to which the individual items of payments should be charged.

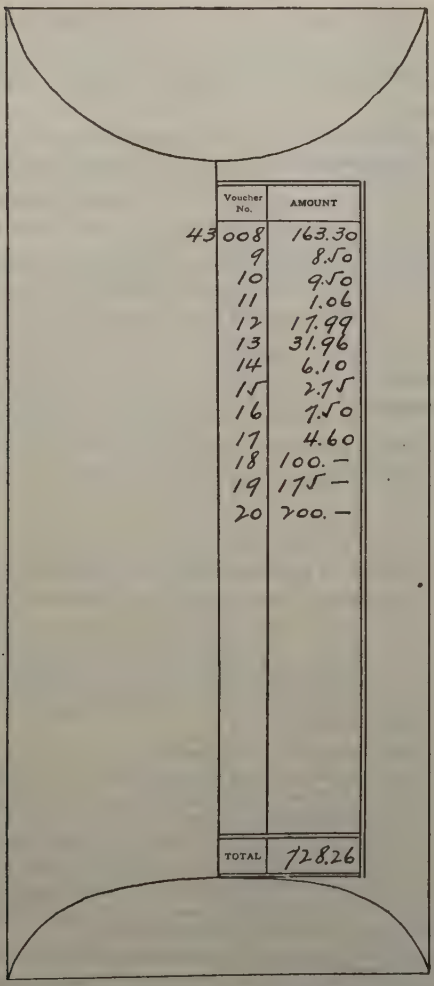


FIG. 23b. Reverse of Imprest Cash Summary Envelope

The total of the individual imprest cash vouchers listed hereon in consecutive order should agree with the total of the charges to the various accounts shown on the face of the summary.

cash required, and noting thereon the cost of the transportation purchased for each employe. The destination should also be shown in each case. All such items should be charged to the individual accounts with the employes and the cost thereof should be shown on the employe's expense reports covering the cost of the entire trip.

PETTY CASH VOUCHERS.—All memoranda showing authority for payments by the cashier should be attached by him to the imprest cash voucher. The vouchers should be numbered consecutively and be released by the cashier only at the time he is reimbursed for the expenditures represented thereby.

Individuals should be required to receipt the cash voucher when it covers advances chargeable to personal ledger accounts.

REIMBURSEMENT FOR EXPENDITURES FROM IMPREST FUND.—As the unexpended portion of the imprest fund becomes low, the fund cashier can be reimbursed by presenting the **imprest cash vouchers,** together with a summary thereof, to the general accounting department and receiving the company's check for the total amount of the summary. Such reimbursement should take place in any event at the end of each month before the closing of the general books, even though reimbursement may have become necessary only the day previous. It may be found practicable to require such reimbursement to be made weekly. If the amount of the fund is in excess of $500 and replenishment is not required oftener than weekly, it would reduce the risk of loss if the amount of the fund were cut in half and reimbursement made semi-weekly.

Proper control over the imprest cash can be had only if the fund cashier's summary and vouchers are first submitted to the auditor and **audit** thereof immediately follows prior to the drawing of the reimbursement check.

Imprest Cash Summary.—Figs. 23a and 23b show the front and reverse sides of a form of envelope which has been found practicable for the purpose of the imprest cash summary. The imprest cash vouchers, with the authority for payment attached thereto, are inserted in the envelope in numerical order when the summary is submitted to the auditor. Where there is no auditor, the financial manager, the treasurer, or even the general manager in small concerns, may audit the summary.

Distribution of Charges.—The distribution of the charges is shown on the face of the envelope summary while the vouchers are scheduled on the rear thereof. Obviously, the total of the distribution and of the vouchers must be identical in amount. The auditor should examine the vouchers and the authority for each payment, check them against the summary and verify the footings of the latter before approving it. After such audit, the approved summary containing the vouchers should be handed by the auditor to the general accounting department for preparation of the reimbursement check, which check in turn should be delivered to the fund cashier.

The cashier should have **a chart of both general ledger and expense ledger accounts,** and he should show on each voucher the account number to which it should be charged. The imprest cash summary envelopes should show a recapitulation of all the charges covered by the summary. The entry on the check register covering the reimbursement check should show the distribution to the various accounts as set forth on the imprest cash summary envelope.

By using the above method for reimbursing him for payments from the fund, the fund cashier at all times should have on hand the amount of the imprest fund, either in the form of currency or currency plus vouchers cover-

ing unreimbursed expenditures made since the last reimbursement summary was prepared.

The envelopes covering the imprest cash summaries should be numbered by the fund cashier in consecutive series; thus consecutive reference data will appear on the general check register from which can be followed a chronological history of all petty cash fund expenditures.

ADVANTAGES OF THE IMPREST PETTY CASH FUND.—The imprest fund method of handling petty cash has many advantages over any other. Among them are the following:

1. The fund cashier has **always a fixed amount** for which he is responsible and the audit thereof can be conducted at any time without notice, simply by examination of the contents of the cash drawer. No examination of any records is necessary other than of the cash and the unreimbursed vouchers in the cash drawer.
2. **A consecutively numbered voucher** is required for each payment by the fund cashier and the authority for such expenditure is attached thereto. Thus a definite method can be consistently followed, authoritative control can be exercised over payments and audit thereof can be readily made.
3. The fund cashier can be **reimbursed as often as desirable** by the simple method of preparing imprest cash summaries and submitting his vouchers, with summaries, to the auditor. He is not dependent for such reimbursement upon any outside factor whatever. He has no books to keep and with each reimbursement his accounts are cleared entirely and he starts anew.
4. The **audit** of the currency payments from imprest funds is **made before reimbursement** instead of waiting for monthly audit of all the cash transactions of an institution.

OTHER PETTY CASH METHODS.—

Petty Cash Payments from Receipts.—In concerns where the petty cash transactions are few, payments are often made from currency included in the daily receipts. It is not good practice to do this as the daily bank deposits will then be less than the current entries shown in the cash received book, and offsetting entries must be made on the check register or cash payment book which are not actually represented by checks. All receipts should be deposited in bank and no part thereof used for petty cash disbursements.

Petty Cash Books.—Still other establishments in which currency payments are not large, believe it burdensome to require a voucher for every small item of disbursement. They draw checks for round amounts from time to time for currency requirements and charge them to a "Petty Cash" account on the general ledger; a petty cash book with provision for entering the proceeds of such checks in one column and the disbursements in another, is the extent of accounting therefor. At the end of each month a journal entry is made crediting the "Petty Cash" account on the general ledger for all of the current month's disbursements as shown by this petty cash book. The balance in the fund as shown by the adjusted balance in this general ledger account should agree with the petty cash book balance. When this method of handling petty cash is used, vouchers may be dispensed with in cases where the amounts disbursed are small and the entries are so explanatory as to clearly indicate that proper payments have been made.

Where it is desired to substitute the use of such a petty cash book for the imprest fund voucher and summary, the fund should be a fixed amount and

the petty cash book should be used only for recording payments therefrom. These entries may be totaled, and reimbursement checks drawn from time to time to bring the fund up to its original amount; at such times the amounts of the reimbursement checks should be distributed on the check register to the various expense and other accounts properly chargeable, as set forth by the petty cash book. If this practice is followed, its effect will be that of having an imprest fund, including all the advantages thereof, but substituting the detailed explanation of each expenditure in a petty cash payment book for the formal imprest voucher summary.

CASHING OF CHECKS BY PETTY CASH FUND CASHIER.—All checks cashed by the petty cash fund cashier should be **drawn to the order of cash,** not to the order of the company, as it is not good practice to permit any cashier to endorse and cash checks drawn to the company's order. Such checks should in turn be cashed daily at bank by the cashier and not kept in the drawer.

Auditors become suspicious if they discover checks deposited in the current bank account which are not represented by entries for corresponding amounts on the cash received book. For this reason, it is desirable that petty cash fund cashiers keep a memorandum reference book for recording consecutively the data with respect to any checks which may happen to have been drawn to the order of the company and are cashed by them for customers, and for which the petty cash fund cashier in turn receives reimbursement from the currency portion of the regular daily collections.

BORROWING FROM PETTY CASH, I. O. U.'S, ETC.—Under no circumstances should a fund cashier carry any I. O. U.'s, uncashed checks, receipts for temporary loans, or any miscellaneous memoranda as part of his fund. If anyone is entitled to cash, let him get proper written authorization for delivery to the cashier at the time the cash is handed over. That authority should be immediately attached to the petty cash voucher and be handled in the regular way.

All advances for traveling, welfare, and even loans, after having been properly authorized, should be handled in the manner outlined and in due course find their way as a charge to the personal accounts of the parties receiving them. It then becomes the business of the accounts receivable unit at the proper time to make collection of the amounts advanced, or to require approved expense reports for credit to such individual accounts.

OVERAGES AND SHORTAGES.—A fund cashier will do well to balance his fund every night; in any event, he should again balance it each time he prepares an imprest cash summary for the purpose of securing reimbursement. If, at either time, there should be a discrepancy between the aggregate of the cash and unreimbursed vouchers on hand, as compared with the proper amount of the imprest fund, the cashier should at once report the matter to the auditor with the request to have an audit made of the fund, and an imprest voucher approved by the auditor for the amount of any shortage. If there is an **overage,** the fund cashier should take an equivalent amount of the cash from his fund and turn it over with a memorandum to the head cashier with the request that it be credited to a "Short and Over" account on the general ledger. Thus reference can always be had to facts which subsequent developments may emphasize the importance of.

Shortages Not to be Made Good by Cashier.—Under no circumstances should any cashier attempt to make good any shortage from his own pocket in order to cover it up. Such a practice might lead to the conclusion that the

cashier is pocketing any overages and if he should do so and it is later discovered, the cashier will be placed in a very embarrassing position.

BRANCH OFFICE PETTY CASH.—Petty cash funds at branch offices can be treated in exactly the same manner as imprest petty cash funds at the head office. In such cases, however, a separate general ledger account should be carried in the head office for each branch fund, or if there are many branches, one such account may be carried in which the amount of the fund at each branch is shown. All branches should mail to the head office at least weekly for reimbursement, their imprest petty cash summary envelopes containing the consecutively numbered disbursement vouchers.

Notwithstanding the number of reimbursements made during the month, all branches should be required to send in a final imprest petty cash summary with vouchers at the close of each month.

PETTY CASH FOR UNCLAIMED WAGES AND LABOR PAY OFFS.—Irrespective of whether it is the practice to pay factory employes by check or in currency, it is often necessary to pay off between pay roll periods such employes as may quit or be discharged or laid off; thus, it is usually necessary for the pay roll department to have an imprest cash fund from which to make such payments, as well as to pay out wages on previous rolls which were unclaimed.

Fund to be Under Control of Paymaster.—Such a fund should be in the custody, or under the immediate supervision, of the paymaster. It should be handled in the same manner as hereinbefore described for the operation of a regular imprest cash fund. The procedure with respect to the origin of the payments, however, is somewhat different.

Making Wage Pay Off from Petty Cash.—Employes demanding previously **unclaimed wages** should be required to present to the fund cashier their individual **clock card stubs** which were prepared on the addressograph in the regular course of business for the week for which the wages were unclaimed; these stubs will show the employe's name, weekly period and employe number. The cashier should then communicate with the pay roll department to ascertain whether the amount claimed by the employe is shown as due him on the pay roll department records. In most cases it will be found practicable for the pay roll department to send a weekly list of unclaimed wages to the fund cashier and to credit the "Unclaimed Wages" account on the general ledger with the total thereof at the time the funds are turned back into the general accounting department. After ascertaining that the employe is entitled to the wages previously unpaid, the fund cashier, upon delivery to him of the proper clock card stub duly receipted by the employe (after it has been validated as to return of tools as hereinafter set forth), may make payment, for which the clock card stub will then act as authority. On his imprest fund summary, the fund cashier will, of course, charge such payment to the "Unclaimed Wages" account.

In the case of employes who are **discharged or laid off,** the receipted validated clock card stubs will also act as a voucher for the payment to the employe. The cashier, however, can secure the data as to the amount to be paid such employe only from the pay roll department, which department should already have received from the proper factory timekeeper the clock card and a pay off slip containing all necessary data from which to prepare a memorandum of the earnings of such employes. Payments of such items should be charged to "Accrued Wages" account on the imprest fund summary.

Reimbursement of Petty Cash Fund for Wages.—It is not necessary for the fund cashier to prepare consecutively numbered petty cash vouchers for the payment to each individual employe, but when he wishes reimbursement, he can sort the various clock card stubs and make out one voucher for all payments on stubs chargeable to the same account, listing on the back of the voucher the clock numbers, names and amounts paid to each employe.

TOOL DEDUCTIONS BEFORE FINAL PAY OFF.—The validation of the clock card stubs previously referred to is merely a check to prevent paying off any employe until he has turned back to the tool crib any tools belonging to the company. Before an employe receives his final payment he should take his clock card to the tool crib clerk of the department in which he works, who will stamp it on the back with an "O" or a "T" and in addition punch the card through the stamped impression with a punch of different design for each tool crib. The "O" indicates that the man has no tools out and is clear in so far as tools are concerned, while a punch through the "T" indicates that the man has borrowed tools and the cashier must make no final pay off until those tools are returned or he has received a written memorandum of the amount to be deducted for the tools not accounted for.

OTHER DEDUCTIONS BEFORE FINAL PAY OFF.—If it is the practice of an organization to make welfare loans, or to sell employes wood, coal or other supplies, a further validation on clock card stubs before final pay off is necessary. Such validation may be in the form of another identifying stamped impression and punch to be applied in the accounts receivable or other departmental unit keeping accounts with employes to whom such advances are made or goods sold. If a **pay off slip** or similar notification from the time clerk is used for notifying the pay roll department as soon as a man has been laid off or discharged, it will be a simple matter to have the validation with respect to welfare and other advances show on this pay off slip, by providing that the pay roll department consult the accounts receivable unit immediately upon the receipt of such notice, which will be before the man appears at the cashier's cage for pay off.

Authorization and Accounting for Cash Disbursements

GENERAL.—All cash disbursements fall within one of **five general classifications:** (1) accounts payable; (2) notes and acceptances payable; (3) pay rolls covering wages and salaries; (4) petty cash currency disbursements; and (5) miscellaneous, such as taxes, dividends, investments, advances for traveling expenses and other direct charges to general ledger, expense ledger or individual accounts.

The financial manager should have absolute control over all disbursements. He should decide the extent of the authority or approval which should be required before disbursements are made; this authority may vary with each class of disbursement. He should issue all instructions covering the method of making the disbursements, the recording thereof and accounting in connection therewith.

In view of the great difference in methods of handling, each class of disbursement will be hereinafter treated separately.

Accounts Payable

CONTROL OF BUYING.—An important consideration in controlling accounts payable is the concentration of authority for their creation. While

operating department heads should usually have a voice in determining the nature, specifications and quantity of purchases for use in their departments, their desires should not be considered as final. Engineering and inventory policies are matters for managerial decision and have a bearing upon purchasing. Financial responsibility, adequacy of equipment and ability to deliver both quantity and quality within desired periods and at proper prices are all items which the purchasing department must consider. For these reasons, deviations from the rule of having the purchasing department actually do all the purchasing, have been usually found to work out unsatisfactorily.

Control of Purchases and Delivery of Materials.—Such methods should be in use by every organization as will insure careful checking of purchase requisitions against the storekeeper's records to prevent excess buying. Even in the matter of nonproductive items, such as factory and office supplies, all purchase requisitions therefor should pass through the hands of one authorized party so as to control expenses. Standardization of supplies, and limitation of selection to a few grades will help to reduce investment in all supplies. To distribute the handling of materials and their financing, special attention must be given to scheduling deliveries over an entire month in conformity with production requirements; otherwise, suppliers in need of funds may ship an entire month's requirements during the first few days of the month.

The purchasing department should receive from the financial manager monthly or weekly limitations as to **maximum purchases** so as to conform to a prearranged financial program. A maximum purchase order limitation may also be set which will require the financial manager's approval of orders in excess of such amount. Much depends upon co-operation between the buying and financial departments of a business. The paragraph on "Daily Incoming Invoice Control" (page 298) should be read. The daily and accumulated monthly totals of the incoming invoices shown by this control might well be communicated to the purchasing department daily by the accounting department.

PURCHASE ORDERS.—The **form** of the purchase order should be as simple as possible to allow wide divergence in its preparation because of the difference in specifications covering the various items purchased. From an accounting viewpont the essentials which must be shown are the **settlement terms, the quantities, the unit prices** and **the f. o. b. basis.**

Purchases from One Concern on Same Transportation Basis.—Wherever possible, purchasing departments should make arrangements with suppliers with respect to transportation charges in a consistent way in much the same manner as they make arrangements for terms of financial settlement. Thus, if goods are purchased from a supplier f. o. b. delivered, all business done with that supplier should, if possible, be done on that basis. A card file kept in the traffic department of such bases will facilitate the proper handling of the transportation items when the bills therefor arrive. In any event, the traffic department will have copies of all purchase orders which should clearly show the f. o. b. terms.

Copies of Purchase Orders.—The originals of the purchase orders should, of course, be sent to the supplier. In large organizations, copies are also necessary for the inspection department, the receiving department, the material tracing unit of the purchasing department, and the cost unit of the factory accounting department. A reference copy for the purchasing department's own files is also necessary.

Purchase Order Change Notice.—Instead of changing purchase orders after issuance, a separate form of numbered purchase order change notice should be used, and copies sent to all parties receiving copies of the original order. Such change notices are really supplements to the original orders and should first refer to the number of the order to be changed and simply record the nature of the modification.

RECEIVING REPORTS AND PACKING SLIPS.—In comparatively small organizations, the receipt of the material may be noted in a place provided therefor by a rubber-stamp impression on the back of the suppliers' invoices.

MISCELLANEOUS RECEIVING SLIP

Invoice Dept. Copy

X. Y. Z. Co.

No. M 63490

RECEIVED FROM _____ DATE _____ 192__

ADDRESS _____ FOR STOCK _____

PART NAME _____ PART NUMBER _____

OUR COUNT	THEIR COUNT	OUR WEIGHT	THEIR WEIGHT	NUMBER OF CONTAINERS

SUPPLIER'S PKG. SLIP NO. _____ PUR. ORD. NO. _____ CHECKED BY _____

CAR NO. _____ PRO. NO. _____ VIA _____ TRANS. CH'G'S _____

FIG. 24. Receiving Department Report

Covers incoming materials and is prepared in triplicate on roller autograph register. First copy is used for checking suppliers' invoices, second copy for tracing material en route, and third copy for stock record keeping.

The storeroom's copy of the purchase order may be used as a receiving report by noting the receipt of the material thereon and sending the order to the accounting department.

Receiving Slips.—In larger organizations, receiving reports should be prepared in the receiving room. An effective form of **receiving slip** is shown in Fig. 24. These slips are prepared in triplicate on roller autograph registers; the original goes to the invoice checking division of the accounts payable unit for attaching to suppliers' invoices; the duplicate goes to the material tracing division of the purchasing department for posting on the back of the purchase order to follow-up the fulfillment of the order; the triplicate goes

to the stock record division of the stores department for posting to the stock records and for numerical reference filing.

Receiving Tags.—In practice it has been found impracticable to have a copy of the receiving slip follow the material and a separate stiff cardboard ticket similar to Fig. 25 is prepared in the receiving department to accompany the material from the receiving room to the inspection department and finally

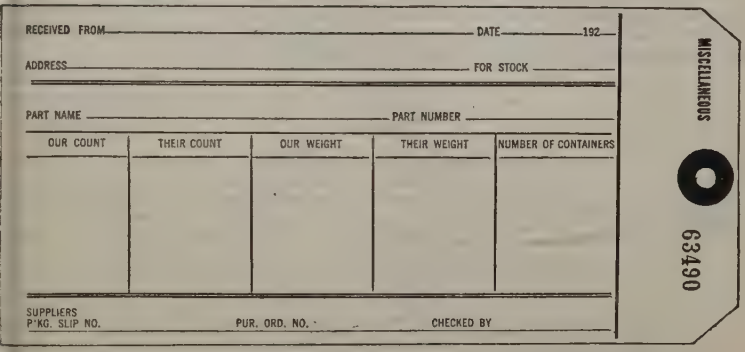


Fig. 25. Receiving Department's Stock Identification Tag

This stiff cardboard tag, prepared coincident with the receiving slips, accompanies the material through the receiving and inspection departments to the stores department. The tag is attached to the material container with wire.

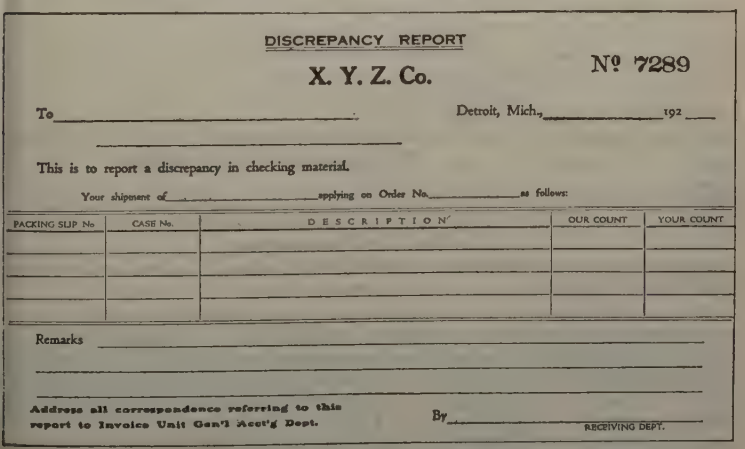


Fig. 26. Discrepancy Report

Prepared in receiving department. Copies are sent to the supplier and to the accounting department, for the issuing, by the latter, of debit or credit memos.

to the stores department. This ticket is attached to the material container with wire; the data thereon are similar to that shown by the receiving slip.

Discrepancy Report.—It should be noted that the number of containers and the supplier's count, as well as the receiving room count, are shown on the receiving slips. These data have often been valuable in settling disputes with suppliers as to shortages. Copies of **discrepancy reports,** Fig. 26, covering differences in count, are sent to suppliers, are attached to receiving slips at the time they go to the invoice division of the accounts payable unit, and are also filed for reference in the receiving room Discrepancy report numbers are noted on receiving slips to which they may be attached.

X. Y. Z. Co.
PACKING SLIP

№ 195901

Received from _____ Date Received _____

Address _____

OUR COUNT		THEIR COUNT		Our Weight	Their Weight	Order No.	SYMBOL	NAME OF PIECE	ROUTING	REC. SLIP NO.
Desc. Pkgs.	Amount	Desc. Pkgs.	Amount							

Car No. _____ Pro. No. _____ Via _____ Packing Slip No. _____ Trans. Chgs. _____

Counted by _____ Signed _____

Remarks _____

FIG. 27. Packing Slip

Prepared in receiving department where supplier's packing slip does not accompany the incoming material.

Suppliers' Packing Slips.—Suppliers' packing slips accompanying the incoming materials should be kept in the receiving room and filed for reference alphabetically in monthly envelopes for each supplier; all of the envelopes for each month should be kept together. In cases where no packing slip is received with the material, a form similar to Fig. 27, to be prepared in the receiving room, will supply the deficiency. The receiving slip numbers should be noted on all packing slips, and vice versa.

AUDIT OF SUPPLIERS' INVOICES.—All incoming invoices should be stamped on the back to provide space for noting audit data covering the pur-

chase order and terms, transportation, receipt of material, approval of unit prices, verification of extensions and accounting distribution, and for noting the posting thereof to the creditors' accounts. Fig. 28 shows the audit data for which provision is made by the use of a rubber stamp such as has been suggested. In the factory where this form is in use, a copy of the purchase order goes to the cost department which checks the account distribution and records on alphabetically filed price cards the quantities purchased and unit prices of production material and the more important factory supplies; if any changes are made in the account distribution which the purchasing department puts on the orders, the cost department immediately notifies the accounts payable unit of such change. These price cards are not only valuable for cost accounting purposes, but also for calling attention to notably large increases in purchase prices of various lots.

AUDIT		DATA
PURCHASE ORDER NO.		PRICE O.K.
REC'G SLIP NO.		TERMS NET 2%-10th
Amt. Frt. or	EXP. Our Cost Their Cost	F O B AT P.O. DEST.
Frt. Chgd. on D.M.No.		CHG. ACCT. No.
QUANTITY O.K.		EXTENSION O.K.
ERRORS CHGD.D.M.No.		O.K. FOR PAYMENT
A/C PAY-INV. ENTERED		A/C PAY-APP.POSTED

FIG. 28. Audit Data Stamp

Placed on all incoming suppliers' invoices immediately upon arrival in the accounting department. All of the data must be filled in and examined by the invoice unit before an invoice is considered audited and finally approved.

Audit Should be Made by Invoice Unit.—All of the auditing of suppliers' invoices, including the matching of receiving slips therewith, should be done in an invoice which in turn should form part of the accounts payable unit of the general accounting department. This unit should insert on the back of the invoice all of the audit data called for by the form with the exception that the "Final O. K. for payment" should be initialed in the purchasing department; this last provision is to give the purchasing department a final opportunity to hold up the bill in case anything has occurred in the relations with the supplier, the inspection or metallurgical test of the material which warrants such action, and of which the invoice unit might not have knowledge.

Transportation Costs.—In the third audit data block, the amount of the freight or express is copied from the receiving reports on which latter form provision has been made for inserting that data. In case articles come in by express, the invoices are sent to the purchasing department for indicating in the right

half of the third block whether the express cost is to be borne by the factory or by the supplier.

RETURNED MATERIAL DEBITS.—When materials or supplies do not pass inspection, or for any other reason should be returned to the suppliers who have invoiced them, it is important that a means be found which will prevent material being returned to the supplier without proper accounting

RETURNED MATERIAL DEBIT

FROM

THE X. Y. Z. CO.

DETROIT

CHARGE TO _____ DATE RETURNED _____

ADDRESS _____ DATE CHARGED _____

Weight	Symbol	Quantity	Description	Price	Amount
			This is an order to perform the service indicated below		

Shipped Shipping Charges

Via Freight ___ Prepaid ___

Express ___ Collect ___

Total Debit

X. Y. Z. CO.

IMPORTANT—This R. M. D. has been charged against you

If material is to be corrected and returned, ISSUE NEW INVOICES as shipments are made, and show R. M. D. Number thereon.

(An unpriced copy of this R. M. D. is packed with returned material)

This number must appear on all invoices, packing slips and packages **RMD A 7280 A**

FIG. 29. Returned Material Debit

This form is prepared in the inspection department to cover sub-standard materials to be returned to suppliers.

record thereof being made and which will insure that all of such returns are recharged to the creditors.

This can be accomplished by having the inspection department issue consecutively numbered **returned material debit forms** similar to Fig. 29, setting forth not only the quantity and description of the material, but also the reason for the return, and the instructions as to method of shipment.

Distribution of Copies of Returned Material Debits.—By the use of very thin paper, quite a number of copies can be made at one writing. A sufficient number must be provided for use as follows:

Packing slip, to accompany the material when returned.
Shipping department instructions, after which this copy should go to the record unit of the stores department.
Supplier's notice, advising him of the rejection even before returning the material so that he will not continue to send unsatisfactory material. The printing on this form, above and below the details of the typed quantities, should be so planned as to make this copy a letter of advice.
Tracing unit of purchasing department, for use in keeping its quantity records up to date and following up the supplier to insure his replacing the rejected material.
Inspection department, for current filing for reference purposes.
Two copies for the **invoice unit of the accounts payable unit.**

One of these two copies should reach the invoice unit immediately after rejection and before the material is returned, so that payment can be stopped on current invoices from suppliers in cases where the value of the rejected material is of sufficient amount to justify it. After the material has been actually shipped, the first copy should be mailed as an invoice to the supplier. Both first and second copies should be priced and completed as to the amount of the charge after getting the shipping charge data from the traffic department. The second copy should then be turned over to the accounts payable unit where it is filed numerically and used as the basis for charges to the suppliers' accounts. Monthly summaries of these R. M. D.'s furnish the amounts to be posted to the debit of the accounts payable controlling accounts in the general ledger and to the credit of inventory or other nominal accounts.

Goods to Replace Returned Material Debits.—In order not to complicate the record keeping in connection with the fulfillment of purchase orders for definite quantities of material on a contract basis, orders to suppliers are typed on the lower half of the R. M. D. form with respect to the performance of such work on the material as will bring it up to specifications; and the supplier is instructed in the lower left-hand corner of the form that when the complaint covering the material is corrected, or the material is replaced, new invoices are to be issued showing the R. M. D. numbers on which the material was originally returned to him.

DEBIT AND CREDIT MEMORANDA.—Suppliers should be charged or credited for differences between receiving room count of material received and the supplier's packing slips without waiting to secure the suppliers own credit memoranda or additional invoices. Suppliers will automatically receive a copy of the discrepancy report hereinbefore mentioned and correspondence will develop therefrom. Any policy of delay in making adjusting bookkeeping entries may, however, result in actual loss.

Memoranda to be Issued by Invoice Division.—Debit and credit memoranda in connection with suppliers' accounts should be issued by the invoice unit

of the accounts payable unit. Most of these will be automatically issued as a result of the data set forth by the discrepancy reports (Fig. 26, page 351) attached to the receiving slips sent to the invoice division by the receiving room. The invoice division will notice these discrepancies when matching the receiving slips with the suppliers' invoices.

The inspection, purchasing and other departments may from time to time find other reasons for sending written instructions to the invoice division for the issuance of such debit or credit memoranda.

Both debit and credit memoranda are prepared in duplicate; the original for mailing to the supplier and the duplicate for numerical filing as the basis for monthly summaries thereof which provide the medium for posting to the supplier's account in the accounts payable unit and to the proper inventory or other nominal accounts.

OUTSIDE OPERATION ORDERS.—It often becomes desirable to send out material to suppliers to have machine operations performed on it or to have damaged material repaired. In such cases most suppliers object to being charged for the material, and the record keeping in connection therewith must be entirely independent of the usual purchasing and invoicing records.

The outside operation order form (Fig. 30) has been successfully used for this purpose. These orders are prepared in the inspection department, which must specify in detail the work to be performed. The inspection department should co-operate with the purchasing department, inasmuch as the latter must negotiate for the price at which the work is to be performed.

How Copies of Outside Operation Orders Should be Distributed.—A copy of the O. O. O. form should go with the material as a packing slip; one should remain with the inspection department for current numerical reference; one should go to the record unit of the stores department; one to the supplier direct; one to the accounts payable unit of the general accounting department for ascertaining the account distribution of the expense which is incurred; and one to the material tracing unit of the purchasing department. The last mentioned copy should be on heavy ledger paper and the back of it so ruled vertically that the tracing department can record thereon the dates and quantities invoiced back by the supplier as the material is received and thus insure all of the material being accounted for. These O. O. O.'s take cognizance of quantities only.

When Purchase Orders are Issued with Outside Operation Orders.—If production material in quantities is to be sent out for machining, the purchasing department first issues a blanket purchase order in the regular way covering the value of the labor to be performed by the supplier on a definite quantity of material. This material may be covered by one or more O. O. O's depending upon whether it is shipped to suppliers in one or more lots; in every such case, all the O. O. O's make reference to the blanket purchase order. The suppliers' invoices for the value of the work also refer to the purchase order number. The purchase order covering the labor may quote a price for the work on the whole lot of material or may quote a unit price.

When Purchase Orders are Not Issued with Outside Operation Orders.—In many cases repair work to individual pieces or small lots of material must be done for which no advance contract price can be satisfactorily arranged and the suppliers must be allowed some latitude as to the proper charge. In such instances, no separate purchase order need be issued; the supplier's invoice must then refer to the O. O. O. number and the invoices be submitted to the purchasing department for approval of the price charged.

OUTSIDE OPERATION ORDER

FROM

X. Y. Z. CO.

DETROIT, MICHIGAN

NAME _____ DATE _____

ADDRESS _____

Weight	Quantity	Symbol	Description
			THIS IS AN ORDER TO PERFORM THE SERVICE INDICATED BELOW

SHIPPED VIA:

COLLECT_____ FRT. _____

PREPAID_____ EXP. _____

X. Y. Z. COMPANY

IMPORTANT - The above has been charged against you on Outside Suppliers Ledgers Account. You will be credited for material accounted for. Report all Rejects, Spoilage and Scrap to our Inspection Dept. and refer to this OOO Number.

This number must appear on all invoices, packing slips and packages.

OOO No. 30848

RENDER ALL INVOICES IN DUPLICATE

FIG. 30. Outside Operation Order

Used in connection with material sent to outside plants for operations to be performed thereon or for repairs.

PURCHASE INVOICE RECORD.—Either currently or monthly a medium must be provided for summarizing all suppliers' invoices under classifications permitting of posting the charges in total to the various general ledger and expense accounts, and of crediting the aggregate of the invoices to the controlling Accounts Payable account. The purchase invoice record is such a medium.

Form of Purchase Invoice Record.—This columnar record provides for recording suppliers' names, the dates and amounts of each invoice, and distribution columns for the various general ledger or expense accounts to which the invoices are chargeable. The record is totaled monthly, after which the total of the invoice column is credited to the controlling Accounts Payable account in the general ledger and the totals of the various distribution columns are charged to their respective general or expense ledger accounts. The detailed invoices themselves must be posted to the credit of each supplier's account in the accounts payable ledger.

Total Monthly Purchases Handled in One Posting.—It will be found practicable and labor saving to file all **incoming invoices** alphabetically during the month and to write up the purchase record at the end thereof after sorting the invoices so that those for each supplier can be entered together chronologically. Where this plan is followed, an extra column must be provided in the purchase record to permit of summarizing the invoices for each supplier; this will enable one posting to be made to each supplier's account for the total monthly purchases. In other cases, however, it may be found that the extra labor in posting each invoice to the supplier's account will be more than justified because of the fact that the suppliers' statements may be reconciled with detailed accounts payable ledger accounts without reference to the purchase record. If the invoices are filed in envelopes for each supplier, after notations are made thereon of the purchase invoice record entry, detailed postings to the suppliers' ledger accounts will be unnecessary, as the invoice file will be available for checking statements.

Accounts Payable Control.—A purchase invoice record, combined with the ordinary debit, credit and balance ledger form for keeping accounts with each creditor, comprise a simple and effective system for use by small concerns in controlling their accounts payable.

VOUCHER REGISTER.—The desire to eliminate the keeping of accounts with each creditor has led to the use of the voucher register and of the so-called "voucher" method of handling creditors' invoices.

Form of Voucher Register.—The form of the voucher register is identical with that of the purchase invoice record, with the exception that a column is added just prior to that provided for the entering of the suppliers' names and another column immediately following that in which the total of all of one supplier's monthly invoices are extended. The first of these extra columns is used for inserting a serial voucher number, while the other is used for posting from the check registers the dates on which the vouchers are paid.

Treatment of Vouchers Payable.—Each voucher consists of a summary sheet to which the monthly invoices of one supplier are attached and on which the dates and amounts of the invoices are shown together with the distribution thereof. When folded, the voucher acts as a protecting cover for the invoices; it is given a voucher number and filed consecutively. Envelopes for the invoices, with distribution thereof on the front, are sometimes used instead of these covers. Usually a new series of voucher numbers is started with each year and the numbers are continued without interruption. In some cases, however, where the quantity of invoices permits, it has been found helpful to start a new series of vouchers each month but preceding each series with the number of the month. The entries in the register are usually for the total only of the invoices covered by each voucher.

Accounts Payable Ledger not Necessary with Voucher Register.—No accounts payable ledger is necessary under this plan; the postings for the payments are made directly from the check registers to the voucher register. The open items at the end of each month in the voucher register form the trail balance of unpaid accounts payable, which should agree with the balance in the controlling account in the general ledger.

Advantages of Voucher Register.—To the extent that the accounts payable ledger is eliminated, the voucher register system is desirable; accounts with each supplier should be paid monthly in full, however, in order make its use satisfactory.

Disadvantages of Voucher Register.—One of the disadvantages of the plan is that because the vouchers are filed numerically, an index must be kept so that reference can be had to supplier's invoices covered by vouchers entered during previous months. Another disadvantage is the fact that creditors' statements cannot be readily checked without recourse to the index and to the invoices, which may be scattered all through the voucher files.

Some concerns who still prefer the voucher and voucher register system have overcome some of the above objections by preparing the voucher itself in triplicate. One of these copies is then filed alphabetically by suppliers, the second is sent to the creditor with the check as a remittance advice and the third copy is filed numerically. The invoices themselves are attached to the first copy.

Summary Sheets for Distribution.—In some cases the number of distribution columns which can be provided in a voucher register of ordinary size is found to be too small for practical purposes. Where this has been the case and it was desired to retain the voucher register method, the plan was introduced of preparing monthly summary sheets (or "analysis ledgers") for each general or expense ledger account and posting thereto the voucher numbers and the amounts, and using one summary sheet for gathering the total of the charges to each of these so-called "analysis ledger" or distribution sheets. This summary was then used as the posting medium to the credit of the Accounts Payable controlling account and to the debit of the various general and expense ledger accounts.

ACCOUNTS PAYABLE LEDGER.—In large organizations where large quantities of suppliers' invoices are received daily, and considerable routine clerical work is necessary before invoices can be approved, loss of cash discounts and even embarrassment may result if entries of the invoices in the accounts payable ledger are deferred until the purchasing department has approved them. The creditors' accounts will be kept up to date and the entire liabilities more readily known if the invoices are entered on the accounts payable ledger as soon as they come in and before they go through the routine of matching with receiving slips and purchase orders, and getting the purchasing department's approval. Thus suppliers' statements may always be checked and payments on account may be safely made.

Posting Approval of Each Invoice.—It is necessary, however, that the approval of each invoice should be again posted to the suppliers' accounts. While this at first thought may appear to be useless and double work, practice has shown that it is amply justified by the control this plan gives at all times over each creditor's account and over the entire financial program; the failure to know the entire amount of the liabilities at all times and to make adequate financial provision therefor has resulted in the failure of many companies. Deductions may thus also be readily made from future remittances for items

previously paid to get the short discount but approval of which may have been subsequently refused by other departments for proper reasons.

Ledger Account which Eliminates Purchase Record.—An unusual form of accounts payable ledger in successful use is shown in Fig. 31, which permits the entering of all invoices as soon as they arrive and of posting their subsequent approval after audit. The distribution columns on this form eliminate the necessity for keeping a detailed purchase invoice record or a voucher register. A separate columnar accounts payable summary for entering the total and the distribution of all the invoices for the month entered in each supplier's account, is all that is necessary. The invoice and distribution columns on the ledger form are memorandum columns only, for entering the invoices immediately upon their arrival. At the end of each month, all these columns on each supplier's account are totaled and the amounts transferred to the columnar accounts payable summary. From the summary, postings are made in total to the credit of the accounts payable controlling account and to the debit of the various general and expense ledger accounts. Postings are also made from this summary to the credit of the suppliers' accounts; the columns to the left of the invoice column on the ledger sheets comprise the suppliers' ledger accounts.

Treatment of Contra Accounts and Payments.—It is important that at least monthly transfers be made from the accounts receivable to the accounts payable ledgers, through the medium of a journal entry, of contra accounts against suppliers. Payments on account need no special treatment, being charged directly from the check register against the suppliers' accounts. To prevent overpayment, however, it is necessary that all cash payments be posted daily to the various ledger accounts.

Advantages of This Form.—The use of this kind of a ledger enables the invoices to be filed in envelopes for each creditor. Suppliers' statements may be checked directly against the ledger without referring to the invoices. Of course, trial balances of the suppliers' accounts in this, as in all other forms of accounts payable ledgers, should be taken and proved with the general ledger controlling account.

ACCOUNTS PAYABLE MACHINE METHODS.—

Disadvantages of Hand Methods.—All of the above records pertaining to purchase invoices and accounts payable ledgers are subject to the possible objection that the entries therein must be made by hand and thus be subject to clerical error and illegibility. Under the plans referred to, the distribution of the invoices to the various general and expense ledger accounts cannot be summarized until the end of the month. In the special accounts payable ledger and invoice distribution form just described, the last mentioned objection is not vital as in actual practice it has been found that such a ledger can be kept with less clerical help than the other systems hereinbefore mentioned and that the distribution of the invoices in the accounts payable ledgers can be summarized and transferred to the accounts payable summary within a day after the close of each month.

Distribution of Invoice Charges by Tabulating Machines.—Nevertheless, the distribution of creditors' invoices to the various general and expense ledger accounts and the summarizing thereof with mathematical correctness has proved to be the expensive and retarding problem in all accounts payable accounting. To overcome this, the making of the distribution by tabulating machines (with the punching of cards for each distribution item or invoice) or cash register

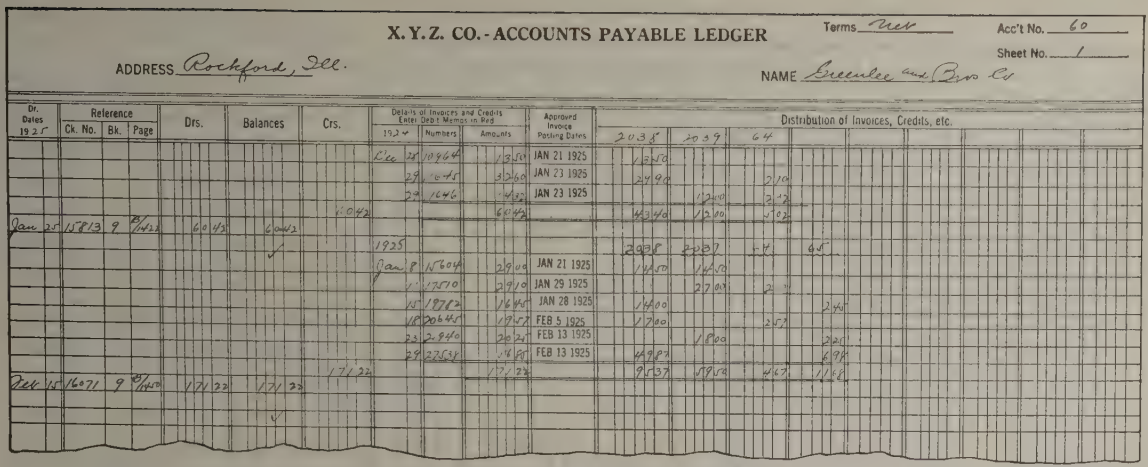


FIG. 31. Accounts Payable Ledger

Invoices are entered and distributed hereon daily, but are really only memoranda until the end of each month; then the entries are ruled and footed and the totals of the invoice and distribution columns transferred from all creditors' accounts to an accounts payable summary; this summary furnishes the monthly totals for credit to the accounts payable controlling accounts and debit to the various distribution accounts.

Coincident with the monthly transfers to the accounts payable summary, the total of the invoices entered currently in each creditor's account is transferred to the credit side of the first three amount columns on the ledger sheet; these three columns comprise the formal accounts payable ledger account with the creditor.

1864

ACCOUNTS PAYABLE INVOICE REGISTER

DATE Sept. 9-1925

Req. Nos.	Date Rec'd from Purch. Dept.	Dates of Invoices	Names of Creditors	Amounts of Invoices	Production Stores Acct 30	Service Stores Acct 40	M.T.C.E. and Mfg. Supplies Acct 58	Product'n & Serv. Frt. Acct 65	Misc. Frt. Acct 66	General Ledger Acct Nos.	General Ledger Amount	Mfg. Expenses Acct Nos.	Mfg. Expenses Amount	Comm'l Expenses Acct Nos.	Comm'l Expenses Amount
75330		9-3	Kendrick Manufacturing	1566.61	1566.61										
75331		9-5	Lamson & Sessions	21.81		21.60		.21							
75332		9-5	J. N. Lapointe Company	64.00						38	64.00				
75333		9-4	Logansport Machine	1.35					.09	2038	1.26				
75334		8-29	Manning Abrasive Company	128.25						39A	128.25				
75365		9-3	Potter & Johnston	13.30						38	13.30				
75366		9-6	Pratt & Whitney	116.38						39A	116.38				
75367		9-6	Pratt & Whitney	10.89						39A	10.89				
75368		9-4	T. B. Rayl Company	16.17						39A	16.17				
75369		9-5	T. B. Rayl Company	1.50						39A	1.50				
				19611.66	17497.96	2676.14	425.53	5795.13	1579.45		5885.76		2515.23		2285.46

FIG. 32. Accounts Payable Invoice Register

Used in machine bookkeeping system; for registering and distributing all daily incoming invoices, and for following up purchasing department's final approval of the invoices.

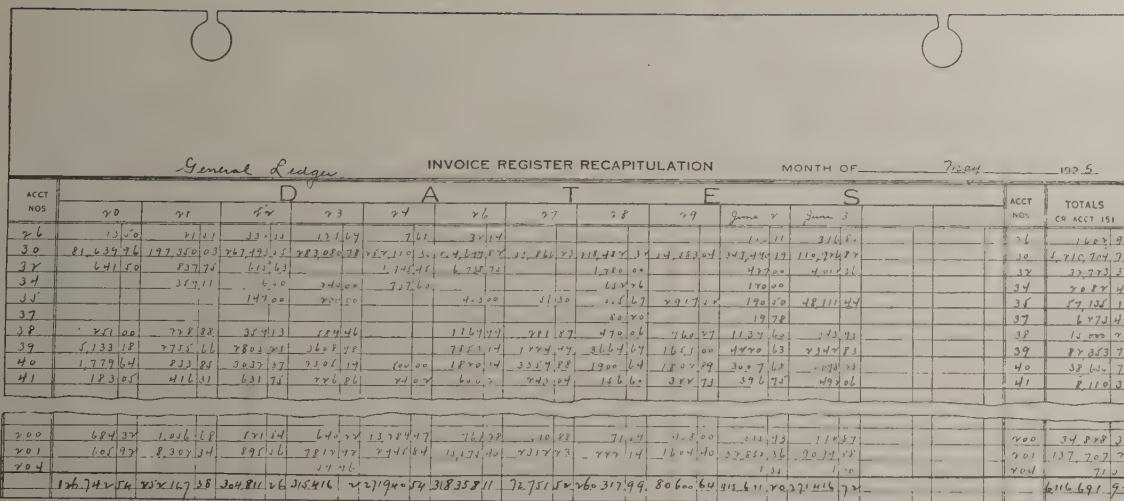
machines (with the stamping of the amounts on individual tickets) has been recommended, and systems providing therefor have been installed in some large institutions. The use of such machines appears unsatisfactory from an accounting viewpoint, since no continuous record is made which permits direct and quick analysis of the general and expense ledger accounts in such manner that reference can readily be had back to the accounts of the creditors with whom the charges originated. In an endeavor to gain the obvious advantages of machine work without sacrificing reference data, the following system was developed; in actual practice it has proven itself to be so speedy as to be more economical than any system heretofore mentioned, while it provides the continuous record so desirable for analysis and reference purposes.

Accounts Payable Invoice Register.—The forms used in the system are an accounts payable invoice register, an invoice register recapitulation and an accounts payable ledger. The invoice and distribution data are entered in the accounts payable invoice register (Fig. 32), daily on a typewriter, from the incoming invoices, after each one has been given a consecutive register number and been compared with the purchase order by the invoice unit. The distribution is copied from the purchase order to the invoices. It should be noted that the second column of the register is used for following up the purchasing department to secure the prompt return of invoices sent to them for final O.K. after the audit data has been inserted on the back of each invoice.

Invoice Register Recapitulation.—Each day comptometer operators summarize on working sheets the total of the charges in the accounts payable register to each of the general and expense ledger accounts; the total of such daily distribution is entered in the invoice register recapitulation (Fig. 33). It should be noted that on the recapitulation form the accounts are listed perpendicularly and that each day's date is entered horizontally over the various distribution columns. Thus, each day's invoices are distributed and the distribution summarized, and at the end of each month the distribution of all the invoices, irrespective of how large the quantity, may be known within half an hour after the close of the month. In actual practice, however, the month is not closed until the second or third day of the succeeding month to allow for entering the invoices of the previous month which do not arrive until a day or two later. Further, the total of the charges to any one general or expense ledger account from the beginning of the month to date may be known almost instantly; where there is any considerable classification of inventory or operating accounts the ability to assertain this is very desirable. Postings are of course made monthly from these recapitulation sheets to the credit of the Accounts Payable controlling account and to the debit of the various general and expense ledger accounts.

Treatment of Debit and Credit Memos.—Credit memos in favor of suppliers and debit memos against suppliers are each given **separate series of consecutive numbers** and are summarized daily on the accounts payable invoice register form and the distribution thereof combined with the distribution of the accounts payable invoices in arriving at the daily figures to be entered on the invoice register recapitulation. In actual practice, the register sheets covering the debit memos are typed in red ink to emphasize the fact that these are charges against the suppliers' accounts. The register sheets covering the credit memos are typed in black ink, the same as are the register sheets covering the invoices.

From the above description it will be obvious that the analysis of any general or expense ledger account simply involves reference to the recapitulation, and



General Ledger — INVOICE REGISTER RECAPITULATION — MONTH OF ____ 19 ____

ACCT NOS	DATES												ACCT NOS	TOTALS CR ACCT 151
	20	21	22	23	24	26	27	28	29	June 2	June 3			
26	13 50	71 11	33 33	12 67	761	3 14				1 11	316		26	1687 92
30	81 634 76	197 350	267 493	283 080						347 443	119 274		30	1 716 704 79
32	641 50	237 74	611 63		1 145 41	6 738 72		1 780 00		4320	4 111		32	33 223 32
34		367 11	6 00	240 00	727 63			48 96		1700			34	7 887 45
35			1470			4 300	5130	2		190	48 111		35	57 132 13
37								80 70		19 78			37	6 970 46
38	751 00	728 88	36 413	284 46		1167 14	781 87	470 06	760 27	1137	143		38	14 000 77
39	5 133 18	2755 66	7803	760		7851 14	1774 47	3664 67	1601 00	4770	4347		39	87 383 77
40	1 779 64	833 84	3037 37	1206 19	600 00	1870 14	3357 88	1900 64	1807 89	300 7	078		40	38 602 71
41	123 05	416 31	631 74	276 86	94 07	600	743 04	186	382	39 6	494		41	8 110 36
200	684 37	1 036 18	491 14	642 44	13 784 47	761 38	10 88	71 49	45 00	214	114		200	34 898 35
201	107 97	8 307 34	891 16	781	2 447 84	13 174	2 417 73	222 14	164 40	32	20		201	137 707 77
204				44						1			204	710
	136 742 54	35 811 26	304 811 26	315 416	72 719 40	54 318 358 11		72 751 54	760 317 99	80 600	64	415 611	70	6 116 691 92

FIG. 33. Invoice Register Recapitulation

Used for summarizing daily the account distribution of all incoming invoices. As many sheets are kept as are necessary to cover all the account distributions.

in turn to the register sheets for the days on which entries appear in the recapitulation.

Accounts Payable Ledger Sheet in Machine Bookkeeping.—Fig. 34 shows the accounts payable ledger sheet, the entries on which are made by a Burroughs #6700 bookkeeping machine with shutter bar and return feature. Postings to the creditors' accounts are made from the invoices immediately after they are registered; these postings are limited to the date, the register number and the amount of each invoice. The small date just previous to the register number on the ledger sheet, should be noticed. This indicates the month in which the invoice is audited and finally approved; this posting of the approval of the invoice is necessary because the suppliers' accounts are credited before the invoices have passed through the routine of audit and approval. The invoice unit inquires into the reason for non-approval of any invoices within 30 days

NAME MOTOR PRODUCTS CORP. PAGE 12

TERMS NET 10TH. & 25TH. STREET 1180 MACK AVE.

CITY DETROIT, MICH.

DATES	REFERENCE	CREDITS	✓	DEBITS	✓	BALANCE	INVOICE APPROVAL
AUG 21	68595	6.75					
AUG 19	68809	23.55					
AUG 19	68810	529.20					
AUG 19	68811	743.80					
AUG 19	68812	573.25					
AUG 19	69032	348.75					
AUG 19	69033	293.80				22,462.09 CR	
AUG 25 CE	159			15,000.00		7,462.09 CR	

FIG. 34. Accounts Payable Ledger Sheet

Used in machine bookkeeping in connection with forms shown in Figs. 32 and 33.

after their date. Because postings are made from invoices and not from the register it admits of great flexibility in distribution of the work. Postings are also made to the ledger accounts from the debit and credit memos and from the check registers.

Daily Balancing of All Records.—An important element in controlling accounts payable by the system just outlined is the daily balancing of all of the records. The invoice register and the debit and credit memo summaries are added daily by comptometer operators and the total of each of these registers are checked against the totals shown by the adding machine registers immediately after postings to the ledger accounts have been made from each of these sources. Postings from the check registers are checked against the accounts payable columns in the latter immediately after the completion of each day's postings therefrom. The totals of the entries on the invoice recapitulation

sheets are checked daily against the aggregate of the invoice register and the debit and credit memo summaries.

Accounts Payable Ledger Trial Balance.—In actual practice, it has been found very simple to take accounts payable ledger trial balances twice a month with much less work than under the old system of doing this once a month. If the daily balancing has been properly carried out, it will invariably be found that the trial balances will be correct the first time they are prepared.

CREDITOR'S SETTLEMENT

NAME Federal Engineering Co. DATE 6/5/25

ADDRESS Detroit, Mich. STATEMENT DATE 6/1 BAL. 420 75

ALL DEDUCTIONS DETAILED BELOW

a

Reference	Amount	Reference	Amount	Reference	Amount
a 78553	12 50				
a 78968	12 00				
	24 50				

Deductions:

A R.M.D.s and D.M.s	24	50
B Excess R.M.D.s and D.M's over Creditor's C.M's		
C Payments		
D Overpayments		
E ____ Total X.Y.Z. Co. Items		
F No Invoices (SEND COPIES)		
G Rec'd too late		
H ____ Total Deductions	24	50
I Net O.K. for Payment	396	25
J Discount: 2% Per. on ____	7	93
Remittance	388	32

PAID
JUN 10 1925
X.
Y.
Z.
CO.

Check No. 6741-BT

We reserve the right to recharge your account to cover errors, overcharges, Shortages and other items not approved by us during subsequent audits of your invoices, and accompanying check is tendered in payment of the above statement, subject thereto.

X.Y.Z. CO.

FIG. 35a. Creditor's Settlement Advice

Prepared in the accounts payable unit. Tnis form is sent with the remittance to the supplier, and, starting with the amount of the creditor's statement, sets forth detailed data respecting the deductions therefrom to arrive at the amount actually remitted. Carbon copy is retained by the accounts payable unit.

CREDITORS' SETTLEMENT AND RECONCILIATION.—One of the most important items in adequately controlling accounts payable and in maintaining satisfactory relations with suppliers is the **prompt settlement of accounts** and full advice with respect to unsettled items. Figs. 35a and 35b show a form of creditor's settlement advice and reconciliation statement which has been found very practicable in this connection. It will be noted that Fig. 35a, the creditor's

settlement advice, starts with the balance shown by the creditor's statement and finishes with the amount of the remittance, while Fig. 35b starts with the balance shown by the supplier's account in the accounts payable ledger, and by the use of the amount approved for payment (item J on Fig. 35b which must be identical in amount with item I on Fig. 35a), a complete reconciliation is provided between the creditor's account in the accounts payable ledger, the creditor's statement and the amount of the remittance.

RECONCILIATION BY ER						DEBITS		CREDITS	
34									
Reference	Amount		Reference	Amount					
Cm 2097	1	50							
					A X.Y.Z., Co. Ledger Balance at 6/1			397	75
					Add to both Drs. and Crs. Unpaid Invoices not on Ledger				
					B No Invoice				
					C _____				
					Add to Crs. only (Details below) Paid not on Ledger				
					D Invoice posted in _____				
					E _____				
					Add to Drs. (Details below)				
					F Creditors C. M.s not covered by our D. M.s				
					G Invoices posted, but not approved				
					H X.Y.Z., Co. Led. Creds. not charged by cred'r	1	50		
					I Our payments not posted				
					J Net O.K. for Payments (C. S.)	396	25		
					K Over Remittance				
					L Total (Drs. and Crs. must agree)	397	75	397	75

Reference	Amount	Reference	Amount	Reference	Amount

FIG. 35b. Creditor's Reconciliation

This comprises the reverse side of the carbon copy of Fig. 35a, and is a reconciliation of the balance shown on the accounts payable ledger with the amount remitted to the creditor. Figs. 35a, and 35b thus comprise a complete reconciliation between the creditor's statement, his account in the accounts payable ledger and the amount remitted to him.

It should be noted that vertical blank columns are provided on the form for detailing under separate classifications such items as are deducted from the suppliers' statements to arrive at the amounts of the remittances.

If these forms (Figs. 35a and 35b) are properly used, the manufacturer will know what items are not on his accounts payable ledger and be in position to gather the necessary data and make adjusting entries, while both the manufacturer and the supplier will know what items are unsettled and the reasons therefor.

Handling of Freight, Express, and Parcel Post Expenditures

The following description of the method of handling freight and express expense bills and parcel post expenditure, in actual operation in a large manufacturing establishment, should be helpful to those who may be called upon to plan for the auditing of such bills and the controlling of such expenses in other establishments. The Interstate Commerce Commission regulations give the transportation companies the right to insist that all bills be paid as rendered within 24 hours; errors must be made the subject of claims to be filed by consignees in a stipulated manner.

INCOMING FREIGHT EXPENSE BILLS.—Bills of lading covering inbound material are sent daily to the traffic department to be filed alphabetically by suppliers' names to await the arrival of the corresponding freight expense bills. The freight expense bills are rendered in duplicate, known as a "delivery ticket," and are usually received coincident with the arrival of the shipments.

Freight Record Book.—Freight bills are entered by the receiving department in a columnar "freight record" which provides for showing the freight expense bill date, the shipper's name, the railroad pro number, the quantity of boxes or other containers, the weight and the freight charges. This record is kept to permit the immediate forwarding of both copies of the freight expense bills to the traffic department and yet have data in the receiving department against which the goods themselves can be checked upon arrival, and from which the amount of the freight charges are transferred to the receiving slips for information of the invoice division of the accounts payable unit of the accounting department in the auditing of suppliers' invoices. The freight expense bills are then stamped by the traffic department to the effect that the goods are "received subject to weight, count and correction," before the railroad's copy is delivered.

Recording Weight and Count.—The weights and count recorded in the freight record are then checked by the receiving department against the actual deliveries by the railroad company; differences are reported to the traffic department for preparation of claims and making of a notation on the freight bills.

Audit of Freight Bills.—A competent man in the traffic department, experienced in railroad shipping matters and familiar with rate classifications, then audits the freight expense bills with respect to the rates charged. The audit of the classification of the shipment is sometimes more important than the rate.

Schedules of the audited freight expense bills are then prepared for each railroad by the traffic department, showing the dates of the bills and the pro numbers. These schedules are prepared in triplicate; one copy is retained by the traffic department and two copies are sent daily to the accounts payable unit of the accounting department, where the freight expense bills are further verified as to extensions and totals, the two copies of the schedule are completed with respect to the amounts of the invoices, and one of those copies is completed with respect to the account distribution. Thereafter, the copy with amounts but with no distribution, is sent to the transportation company as a remittance advice.

The originals of the freight expense bills are subsequently stamped paid in the railroad office and returned to the traffic department where they are compared with the suppliers' bills of lading and then filed in monthly envelopes for each supplier.

INCOMING CARLOAD SHIPMENTS.—In the case of carload lot shipments, the procedure is similar to that above described except that in the traffic depart-

ment an additional record, called the "**incoming carload lot register,**" is maintained for the recording of data pertaining to the railroad car initials and number, the shipper, date of receipt of the car, weight and the amount of any "collect" freight charges, which data are necessary for later reference purposes. This register is arranged according to railroad car number, the last two figures of which comprise the register page index, independent of how many digits precede such figures or of the initials of the railroad owning the car. Entries in this register are made immediately upon receipt of the bills of lading in the traffic department with respect to all of the above data with the exception of the amount of the collection charges; the freight expense bill is the source from which the latter information is posted to the register.

Reports of Incoming Carload Lots.—A yard man, the direct representative of the traffic department in the placing of incoming cars and in the dispatching of outgoing cars, sends several times daily to the traffic department, lists of the various incoming railroad cars, from which lists the traffic department completes the data required by the incoming carload lot register.

The collect freight expense bills are from this point on handled in the same manner as described in the preceding paragraphs covering the ordinary incoming freight expense bills for less-than-carload lot shipments.

INBOUND EXPRESS CHARGES.—Express receipts arriving with the suppliers' invoices are sent directly to the traffic department to await arrival of the goods. Upon the arrival of express shipments in the receiving department, the data pertaining thereto, and the amount of the express charges thereon, are entered in a separate "**incoming express book,**" similar to the "freight record" previously mentioned, which permits the later transferring of the amounts of the charges to the receiving slips covering the material.

As each shipment arrives, entry thereof is made from the express bills to a daily **"inbound express register"** kept by the traffic department. The express companies' weekly statements are checked against this register by the traffic department after its verification of the express classifications and rates. The statements are then sent to the accounting department, where the extensions and totals are verified before the usual remittance advice is authorized, and the account distribution set forth alongside the individual items.

INBOUND PARCEL POST.—Since all incoming parcel post charges are prepaid, it merely becomes necessary for the receiving department to note the amount of these **charges on the receiving slips** covering the material, to provide the accounting department with data from which to check the correctness of the suppliers' billing of these charges on their invoices, covering material purchased f.o.b. shipping point.

OUTBOUND FREIGHT.—Bills of lading covering outbound material are prepared in duplicate in the shipping department from that department's copies of the sales orders or returned material debits; the numbers of the latter forms are noted on the bills of lading. The originals of the bills of lading are sent to the accounting department and the duplicates to the traffic department.

When material is sent "collect," that fact noted on the bills of lading is the only reference made thereto. Where freight is prepaid, but properly chargeable to consignees, the amounts of the prepaid charges are noted on the bills of lading.

The **original bills of lading** sent to the accounting department are held until the arrival of the suppliers' and accounting department copies of the R. M. D.'s or of the billing copy of the sales order, when the amounts of the prepaid charges

are added (prior to mailing the bills of lading) to the said R. M. D. copies or the sales order before billing. This operation is simple, as the R. M. D. or sales order numbers always appear on the face of the bills of lading. The original bills of lading are then mailed out with the suppliers' copies of the R. M. D.'s or the customers' copies of the sales invoices.

The traffic department's copies of the bills of lading covering outbound material are filed for reference in an "outbound shipments" file.

OUTBOUND EXPRESS.—If the material is sent out on an "express collect" basis, the shipping department merely attaches the express receipt to the copy of the returned material debit or sales order going forward to the consignee. In the event of prepaid shipments, however, a copy of the express bill is sent to the traffic department for entry record in its **"outbound express register"** for use in verification of the express companies' weekly statements. The shipping department copy of the sales order or returned material debit also carries proper notation as to the routing, date of shipment and amount of prepaid charges, which the accounting department in turn uses as the basis for the billing thereof against the consignees.

OUTBOUND PARCEL POST.—The shipping department makes note upon the face of the sales order or the R. M. D. of the amount of the parcel post expenditure as well as of the mailing date, the weight of the shipment and the serial numbers of any insurance coupons. This notation permits the accounting department to bill the consignee for the parcel post and insurance charges.

FREIGHT CLAIMS.—In the event of a shipment being received in damaged condition or noticeably short from the quantities called for by the bills of lading or freight and express expense bills, the receiving department endeavors to obtain the signature of one of the transportation company's employes to the notation of damage or shortage made on the face of the expense bills. This department also sends to the traffic department an **"exception report,"** shown in Fig. 36, which is a consecutively numbered form of report setting forth the data as to the shipment and the shortage or damage to which exception is taken, and which forms the basis for the traffic department filing a claim with the transportation company.

Notation is also made on the receiving slip covering damaged or short shipments, of the number borne by such "exception reports." This is of considerable assistance to the accounting department when matching the receiving slips with the suppliers' invoices, as in such cases a positive recheck is made before the suppliers' invoices are passed, to see that claim has actually been filed by the traffic department and to ascertain whether or not such claim appears to be collectible. The accounting department is notified when the claims are discharged by the transportation company; those paid are covered by remittance which is turned over to the accounting department upon receipt.

FREIGHT AND EXPRESS CHARGEABLE TO SHIPPERS.—At the time the "audit data" is placed on suppliers' invoices by the invoice division of the accounts payable unit, as referred to under the heading of "audit of suppliers' invoices," such invoices as cover merchandise **on an f.o.b. destination basis** are retained in separate folders in the invoice division until the receiving slips are matched therewith. Special attention is given in matching the invoices with these receiving slips to see whether the latter have a notation as to payment of any collect freight or express charges; in every case where any such collect transportation charges were paid, a **transportation debit request** similar

NO._____

– EXCEPTION REPORT –

DATE_____

SHIPPER

POINT OF ORIGIN

FREIGHT BILL

FACTORY PRO

All freight bills having exceptions should be signed by freight agent.
In case of concealed loss or damage hold intact and call _____
who will have railroad inspector call and examine.
This report to be attached to freight bill and sent to Traffic Dept.

OVERS

List in detail all articles received, not billed on freight bill. Give shipper's name, case number, weight and any additional information that will help in identifying.

SHORTS

List here articles billed, but not received.

DAMAGES

List here articles damaged, giving nature and extent of damage.

SIGNED:_____
Receiving Clerk

FIG. 36. Exception Report

Prepared by the receiving department to cover damaged material or noticeable shortages from the quantities called for by the bills of lading or freight and express expense bills. Notation of the exception report number is made on receiving slips for use in accounting department audit of suppliers' invoices. Traffic department prepares claims on transportation companies from these reports.

to Fig. 37 is prepared by the invoice division and used as the basis for the preparation of a debit memorandum against the supplier.

The transportation debit request is prepared in every instance (irrespective of purchase terms) where receiving slip notations show that there were any **collect express charges.** In cases, however, where the audit data on the supplier's invoice show that the purchase order was issued on an f.o.b. shipping point basis, a freight allowance to the shipper is in order and such transportation debit requests are first sent to the traffic department to have them insert the data as to proper freight allowance, after which the debit memorandum against the supplier is issued for the amount of the express charges less the freight allowance.

Transportation Debit Request No. 378

CHARGE

Name_____ Invoice Date_____

Address_____ Invoice No._____

WITH

Express chgs. paid by H. M. C._____ lbs._____ $_____

Less

Freight Allowance on_____ lbs._____ at____ cwt. $_____

Freight On Car Number / Carrier's Pro. _____ lbs._____ $_____

Less Freight Allowed On Invoice_____ $_____

AMOUNT OF DEBIT $_____

REMARKS_____ DEBIT NO._____ Authorized by_____

FIG. 37. Transportation Debit Request
Prepared by invoice division during audit of suppliers' invoices.

Notes and Acceptances Payable

SEPARATE CONTROL FOR EACH CLASS OF OBLIGATION.—Notes payable for borrowed money, those issued in payment of current accounts, and trade acceptances, represent three separate and well defined financial obligations. The financial manager will not only want to know the amount of each class of liability outstanding, but will want to have for reference and for future planning a classified record of past practice. It will, therefore, be found desirable to keep **separate general ledger controlling accounts** for each of these classes of obligations, and to use a separate series of consecutive numbers in each case. The notes, of course, should be numbered at time of issue; the acceptances payable may be numbered at the time of acceptance.

SIGNATURES REQUIRED.—The signatures to be required upon notes and acceptances should be specified by directors' resolution. The signature of the financial manager should appear on all notes payable and acceptances. In addition to such signature, all notes payable for borrowed money should require the signature of the treasurer or another executive officer while notes in

payment of current accounts and acceptances payable may require the additional signature of an executive officer or of the auditor. The advantage of having the financial manager's signature on all of these obligations is to ensure his supervision over the incurrence of the indebtedness and to make sure that the notes and the acceptances are regular and in proper form and that the accounting thereof has been taken care of before they leave the office. The financial manager should issue instructions covering the detailed handling and recording of these instruments and require the initials of his chief clerk on each of the notes for borrowed money, and the initials of the accounts payable unit head on the acceptances and notes for current obligations, before affixing his signature thereto, as indicators that such instructions have been carried out.

NUMBERING OF NOTES AND ACCEPTANCES.—Notes should be consecutively numbered as they are issued. Acceptances payable should be given a series of numbers entirely separate from those used for identifying notes payable. Where financing is done through the sale of commercial paper, the issuance of and the accounting for such commerical paper may be simplified by printing or engraving notes of a special form in multiples of $5,000.

REGISTERS TO RECORD OBLIGATIONS.—Registers should be provided for recording each class of obligation separately by consecutive number, and showing the maturities in classified monthly columns. Where the number of pieces of paper of this nature is very large, consecutively filed cards with monthly index tabs may be used as a register. Payments of the notes or acceptances should be posted in the registers. The open items in the latter should be listed monthly and proved against the balances in the general ledger controlling accounts.

If the registers covering notes and acceptances payable to creditors are in book form, either loose-leaf or permanently bound, they may be **summarized monthly** and used as the basis for journal entries to the controlling subsidiary ledger accounts. The notes payable for borrowed money should find their way to the credit of the liability account through the cash receipts book, as the proceeds of the notes will appear therein as the instruments are issued.

DISPOSITION OF PAID INSTRUMENTS.—Payment of the notes and acceptances will of course be entered in the check registers. The paid documents should not be destroyed until after the regular audit by public accountants. If the notes or acceptances are retired in any other manner than by payment, they should be marked with the date and a memorandum showing the nature of such transaction, and the accounting thereof covered by journal entry.

Payment Methods and Records

CASHIERS.—Originally the title of "cashier" was generally understood as applying to the chief executive officer of a bank, or other financial institution, charged with the practical management of its property and business in the usual and ordinary way. Today, the term has no such limited application, but it is pretty generally understood to also apply to those persons who are directly responsible for the actual receiving and paying out of funds in mercantile and manufacturing establishments. This is the proper designation for persons performing such functions, irrespective of whether or not their transactions are "over the counter" or entirely by mail.

Various Functions of Cashiers.—Small organizations may have but one cashier whose function includes both the receiving and the paying out of funds. In

large organizations these functions will be distributed among many cashiers. Thus, one organization may have cashiers for the handling of office receipts and still others for the mail receipts. Likewise, there may be a number of disbursement cashiers performing widely divergent functions; thus, there may be check disbursement cashiers in the accounts payable unit, office currency disbursement cashiers, one or more petty cash cashiers, pay-off cashiers who will disburse funds to men who may be discharged or quit between regular pay roll periods, and the regular paymasters.

Methods and Records Prescribed by Financial Manager.—The methods of disbursement and the records to be kept by the cashiers should in every case be prescribed by the financial manager. Provision should be made for daily summarized reports to the general accounting department by all the various cashiers and the facts set forth by those reports should be entered in the daily general cash receipt books and check registers.

For details with respect to the methods and records covering the collecting and recording of cash receipts through office cashiers and by mail, the reader is referred to pages 316 to 333, under the heading, "Collecting and Recording of Cash Receipts." The preparation and disbursements of pay rolls will be covered in detail later.

AUTHORITY FOR DISBURSEMENTS.—Authority for disbursements covering accounts payable should originate in the accounts payable unit with the preparation of creditors' settlement statements, as hereinbefore set forth under the caption, "Creditors' Settlement and Reconciliation." The amount of the remittance called for by such statements should be approved by the accounts payable unit head and the forms then passed on to the accounts payable cashier, who should be responsible for the preparation of the checks and their entry in the check registers.

If the business is large enough, separate check registers may be assigned to the accounts payable unit. If not, a general cashier can be made responsible for the issuance of all checks. In any event, checks in payment of creditors' accounts should be issued only upon the authority of the accounts payable unit head.

A **"request for check"** form, requiring the approval of the financial manager may be used to authorize disbursement cashiers to draw checks for other purposes, such as notes and acceptances payable, pay rolls, dividends, investments, advances for traveling expenses, petty cash reimbursements, etc. Such requests may be in memo form, but should be prepared and signed in the first instance by departmental chief clerks, chief paymasters, general ledger bookkeepers, and even officials whose position, knowledge of, and responsibility for, the correctness and propriety of such payments justifies the requirement that they sign such requests before being sent to the financial manager for the latter's approval and issuance of the checks. These requests should be specific and give ample details in addition to the name of the payee and the amount. Requests for checks covering notes or acceptances payable should specify the numbers and maturities of the instruments; those covering pay rolls should be certified to by the chief paymaster; those covering petty cash reimbursements should require the signature of the auditor or designated clerk who has audited the vouchers and the summary entered on envelopes containing them; those authorizing large traveling expense advances to be made by check should be signed by the various department heads and those issued in connection with dividend and investment disbursements should be signed by the treasurer. The financial manager should, of course, exercise discretion in han-

dling these requests, not hesitating to demand further information in cases of doubt, and even requiring copies of directors' resolutions, certified to by the secretary, or even the production of the minute book itself, where the nature of the transactions indicate the desirability of such action.

Currency disbursements should be made only from petty cash funds. Full details with respect to the establishment and operation of such funds, the authority for payments therefrom, and the records and reports to be made in connection therewith, are hereinbefore set forth under the caption of "Petty Cash" (pages 340 to 348).

Where practically all payments are made by check, the office and record work can be better systematized, there is less danger of inside peculation and the risk of loss through bandits is almost negligible due to the small amount of petty cash currency which need be carried on hand.

ADVANTAGES OF CHECKS.—When a check is used there is more assurance that the funds will reach their proper destination than when currency is paid to creditors' representatives. The use of the check also eliminates the necessity for inquiry into the authority of collecting agents if the checks are drawn to the order of the creditor. Checks provide direct evidence of payments, and permit tracing of the disposition of funds, which is not the case in connection with currency payments.

FORM OF CHECKS.—So-called **"voucher checks"** are quite widely used which provide for an itemized statement either on the back or on the face of the check. Sometimes this statement is separated from the main body of the check only by a perforated line, which permits the detaching of the statement before the check is used. Creditors are entitled to a detailed record of the items covered by checks; but to put those details on the back of a check makes it necessary for the creditor to copy those details in his own records or do without the data. There is no reason why the banks that subsequently handle the checks should know the details of the creditor's business. All statements, either attached to or on the back of the checks, become unnecessary if the creditor's settlement and reconciliation form (Figs. 35a and 35b) is used in preparing the necessary data prior to the issuance of the check.

Carbon Copies.—Some concerns still use carbon copies of checks as a check register. In few cases does this practice really save time, as usually it is still necessary to have a columnar check register summary to distribute the items chargeable to the same controlling accounts and to cover allowances, discounts and other deductions.

Checks for Wages.—Where checks are used for the payment of wages, or are issued by various cashiers subject to prescribed limitations, it is well to carry separate bank accounts and to have the check form engraved or printed with the **legend on the face** "Not good if over $200—"; of course the amount of the limitation may be fixed at any desired figure. In the case of wage checks, it might be wise also to have a legend appear on the check to the effect that it is "Void thirty days from date." This provision on the face of such checks will cause them to be used more quickly than might otherwise be the case.

Form of Checks to Facilitate Mailing.—The checks can be so designed that the written amount of the payment appears on the first full horizontal line of the check and the name of the payee and address in the lower left-hand corner of the check. Such a form will permit the check to be used in a look-out envelope and thus eliminate the necessity for addressing the envelopes.

Protection Against Forgery and Alteration of Checks.—Typewriters with "Protectograph type" for use in drawing checks and Protectograph machines of many kinds are on the market, all of which doubtless contribute something toward discouraging check alterations. Surety companies, however, claim that there is no such thing as absolute check alteration prevention and that an indemnity policy against loss therefore is most desirable. Certain it is, that a check forgery (of drawer's signature or that of endorser) and alteration policy in a reputable surety company will simplify settlement, eliminate legal costs and avoid serious loss in cases of forgery or "raising" of a check.

Special forms of checks and the use of special paper also tend to reduce the risk of loss through check alterations. Water-marked paper, safety coatings which will show the action of acids, and the use of various colors of paper and of ink should be given consideration. Special colors and letter prefixes to check numbers will identify the various bank accounts and assist clerks in their entries.

CHECK REGISTERS.—A check register is the most satisfactory book of original entry in which to record checks. By the use of properly headed columns, the total of the monthly charges to the various nominal accounts and the credits to the banks can be readily obtained and detailed posting to subsidiary ledgers also provided for. A column for recording the check numbers will eliminate any excuse for using check stubs.

Where more than **one bank account** is kept, a separate column on the check register will have to be provided for each account; or, a separate series of register sheets may be assigned to recording the checks on each bank. Where the latter practice is used, a general check register summary is necessary in which to record the aggregate of the daily entries in each register. In large institutions where there are a number of different cash receipt books and check registers, a general cash book can be used to summarize both the receipts and disbursements, and also show therein the aggregate of the daily balances in all the banks.

Where a number of different controlling accounts are kept covering not only assets and liabilities, but also various groupings of expense accounts in subsidiary ledgers such as "manufacturing expenses" as distinguished from "commercial expenses," the number of columns in the check registers can be reduced. As few charges as possible should be made direct from the check registers to expense accounts, and if the methods of handling the accounts payable and petty cash have been carefully outlined and properly followed, the number of direct expense charges in the check registers will be very small, as most of the checks will be charged either to accounts payable controlling account, to the petty cash reimbursement account or to accrued pay rolls.

DAILY FINANCIAL REPORT.—Daily and cumulative summaries of disbursements are necessary for use in the daily comprehensive financial report which should come to the treasurer from the financial manager. (See Figs. 6a and 6b, pages 301, 302, for a form of such condensed daily financial report.) All data in such reports as pertain to cash receipts and cash disbursements should be prepared from the cash receipt books and check registers, or from the general cash book previously referred to.

Preparation and Payment of Pay Rolls

GENERAL.—Fundamental to the control of payments to employes, whether for salaries, wages or welfare, are a departmentalized plant organization, a

systematic plan of assigning numbers to employes, a concentration of the responsibility for the hiring and discharging of employes, and the preparation of such original records in connection therewith as will insure the addition to the pay rolls of the names of only such persons as are bona fide employes, as well as their removal from the roll upon the discontinuance of their service.

Not less important, however, are the effective planning of methods covering timekeeping, and the preparing of wage payment data (the hours or the production in cases of piecework, or individual or gang premium or bonus) and the reporting of these data to the pay roll unit for the subsequent classification thereof and the preparation of the pay rolls.

Another consideration in the control of pay rolls is the securing and proper filing of data covering the personal history of each employe, the authority for his engagement and discharge, the original basis of remuneration for his services and any later changes therein.

EMPLOYMENT DEPARTMENT.—In all establishments of any size an employment department is essential; the head of such a department is the **employment manager.** He should be charged with all responsibilities in connection with the engagement and discharge of employes and the communicating of those facts to the pay roll unit of the factory accounting department. The employment manager may also supervise the safety first, firs aid or hospital, workmen's compensation and welfare activities of a plant.

Because of technical requirements of engineering or office departments, office managers or even office department heads may have similar duties assigned to them with respect to employes in their departments. In such cases, however, all the data with respect to such office employes, except the salary rates, should be duplicated in the employment department for reference purposes.

NUMBERING SHOP EMPLOYES.—It will greatly simplify the later work of the **pay roll unit** if a scheme for the numbering of shop employes is planned by the financial manager in conjunction with the factory manager (or divisional shop superintendents) in such manner that not only are separate series assigned to employes in the same department but also to the subdivisions of such departments. Thus, for example, in the motor department of an automobile factory not only would a series of numbers apply to all the employes therein, but the series would be divided into groups assigned to employes on machining operations as distinguished from those on assembly operations; each of these groups of numbers in turn would be further subdivided so that all employes on crankshaft operations would have a designated series of numbers, those on camshaft operations another series, those on cylinder block operations still another series, etc.

Such a plan will permit the subdividing of the pay rolls themselves into small sub-departmental labor groups and simplify the gathering of data in the pay roll unit. Where so-called "**gang**" **or group premium bonus plans** are used, such a systematized method of assigning numbers to employes in relation to factory operations is indispensable. Another decided advantage of adopting such a plan of numbering employes lies in the fact that it is easy for a representative of the auditing department to readily check the men on the jobs in the shop in any one department or portion of a department, and thus identify those on the pay rolls as actual workmen.

HIRING OF SHOP EMPLOYES.—The need for help is naturally first felt in the various operating departments of a factory. This need should find expression in a foreman's "**requisition for help**" (Fig. 38) on the employment department. The provision that the factory manager or the divisional shop

superintendents first approve all such requisitions should prevent the excessive hiring of men. The making of a separate requisition for each new employe is of help to the employment department in handling applicants, as it must deal separately with each man.

Classification of Requisitions for Help.—The requisitions should be classified in the employment department as to nature of work and index cards used to separate the various classifications. With this file as a guide, a "**first interview**" **clerk** should be at the applicants' entrance to the employment department to see as many applicants as he can within a short period of time; from his file he can instantly ascertain whether or not there is any demand for labor of the nature applied for; if so, he should remove the requisition from the file and give it to the applicant with instructions to pass on and interview one of a group of "detailed interview" men, whose business it should be to go into the

REQUISITION FOR HELP

Nº 137015

EMPLOYMENT DEPT. Date 9-30-1925

Please Employ for the 2429 Department

One Man At 44¢ Per Hour

Description of Help Wanted Screw Machine Operator

To Replace 242974

To Increase the Forces to Secure Larger Output

Permanent X Temporary

Please state the kind of Machine and for what particular Job if possible

Transferred to _____ Dept.

Promoted in this Department

To be paid in Full

One Requisition required for each Man

Rate

B. Moore
Foreman

L. Thompson
Factory Mgr. or Supt.

FIG. 38. Requisition for Help, on the Employment Department
Originating with the foremen of shop departments

history of each man and ascertain his qualifications. If not hired, a detailed interview clerk should lift the requisition and return it to the first interview clerk. If the man is engaged, his name should be inserted on both copies of the requisition by the detailed interview clerk and the man and the requisition immediately turned over to one of the typists in the same office for the preparation of the employe's employment record card (Fig. 39), three copies of the employe's rate card (Figs. 40a and 40b) and the employe's clock card (Fig. 41).

Procedure in Handling Employe Records.—The employe should be required to affix his signature to the employment record card and to the back of the third copy of the rate card, and then be given the duplicate of the foreman's requisition and the clock card and instructed to report to the foreman for work, after "ringing in" his clock card on a time clock located in the employment

department; this time clock should be equipped with a specially colored ribbon for identification purposes. The duplicate of the requisition is notice to the foreman that the man is reporting in response to his request for help; this duplicate should then be destroyed and the clock card handed over to the department timekeeper by the foreman.

The top part or stub of the clock card should be detached by the employe immediately upon reporting to the foreman and by all employes at the beginning of each week from the new clock cards. This stub may be used as an employe's factory pass and as a receipt for wage payments by collecting them at the time of paying the wages after the stubs have been signed by the employes.

EMPLOYEE'S EMPLOYMENT RECORD Master No. 2823.

Birthplace ATLANTA, GA.	In U. S. A. Since	Age 24	5 Ft. 9 In.
Citizen YES	1st Papers 2nd Papers	Weight 145	Race W
Address 2556 EUCLID AVE.		Telephone HICKORY 1403-J	
Where Last Employed STUDEBAKER PLANT #3		Sex MALE Married	Single YES
Quit 3/14/46	Laid off YES Discharged	Remarks	

SYM	DEPARTMENT	OCCUPATION	DATE	RATE		FOREMAN
E	440	Machine Operator	10-1-23	.44	Hr.	COFOST
R	459	Machine Operator	2-4-24	.50	"	SMITH
T	900	Time Clock	10-1-24	Salary	Roll	MEGARGLE (Factory Acctg.)

E-EMPLOYED T-TRANSFERRED R-RE EMPLOYED

John James Doe
First Name Middle Name Last Name

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

NAME JOHN J. DOE CLOCK No. 44016 - 45086 - 90010

Typewrite on the Perforated line above then cut off ON THE LINE.

FIG. 39. Employe's Record Card
To be kept in the employment department.

EMPLOYE'S EMPLOYMENT RECORD CARD.—The employe's employment record card (Fig. 39) is the employment department's historical record of each employe and will enable detailed interview clerks to consider re-applications of former employes in connection with their past records.

The form shows the data which should be kept on the record card. The back of the card should provide for a continuation of the department and occupation data after the face of the card has been filled. The printed consecutive numbers along the lower border may be used as an index number in connection with any nationality or other classification which the employment department may desire. The design of the card shown in Fig. 39, with the name and current clock numbers at the extreme lower end, enables its use in modern visible filing systems, such as the Kardex or Rand.

The **master number** appearing at the top of the record card refers to a series

of numbers which should be assigned to all new employes to assist the pay roll unit in scheduling on its own cards the detailed current earnings of each employee; the total annual earnings of each employe must be known to enable compliance with the federal government's present requirements that report be made to it of the total of the payments to employes who receive in excess of $1,000 per annum. In the pay roll unit the employes' cards can be kept by master

Master No. 2923 — EMPLOYEE'S RATE CARD — Clock Nos 44016

Time Dept. W

Name JOHN J. DOE Married ____ Single YES

Foreman COMFORT Bldg. ____

Employed as MACHINE OPR. 10-1- 1923

Paid Off ____ 192

Rate												
	Date											
	Amt.	.44										

Fig. 40a. Employe's Rate Card

Prepared in employment department and used as authorizing pay roll additions at specified rates.

The rate of pay shall be that shown on the reverse hereof and shall be subject to change by the X. Y. Z. Co.

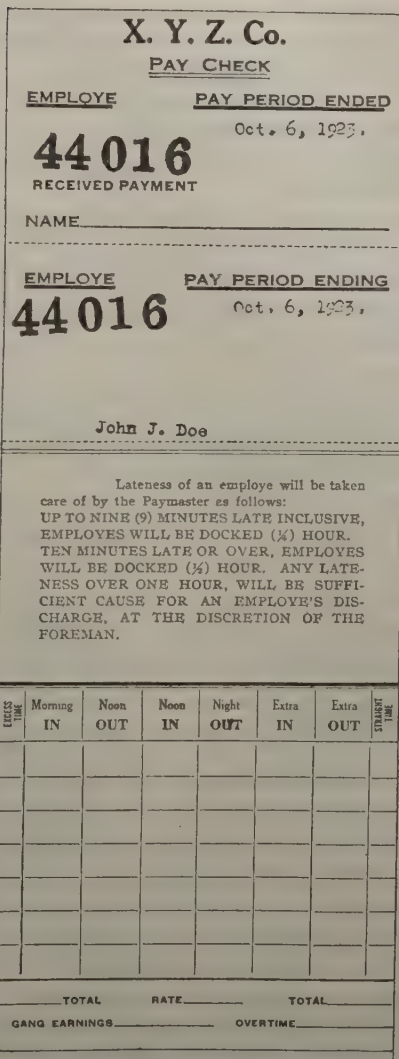
No guarantee or agreement has been made as to length of service and the X. Y. Z. Co. is hereby permitted to pay me daily, weekly or semi-monthly and to change its method of payment at its option without incurring any obligation to pay me for any period beyond that for which service shall have actually been rendered.

In part consideration of my employment by the X. Y. Z. Co., I agree to pay one half the replacement value of any tools, instruments or diamonds which I may lose or have out of tool crib on check and do not return upon demand or when leaving the employ of the X. Y. Z. Co.

Witnessed *A. C. Wood* Signed *John J. Doe*

Fig. 40b. Reverse of Employe's Rate Card

Setting forth details of understanding governing individual employment.



X. Y. Z. Co.

PAY CHECK

EMPLOYE 44016 RECEIVED PAYMENT

PAY PERIOD ENDED Oct. 6, 1923.

NAME

EMPLOYE 44016

PAY PERIOD ENDING Oct. 6, 1923.

John J. Doe

Lateness of an employe will be taken care of by the Paymaster as follows:
UP TO NINE (9) MINUTES LATE INCLUSIVE, EMPLOYES WILL BE DOCKED (¼) HOUR.
TEN MINUTES LATE OR OVER, EMPLOYES WILL BE DOCKED (¼) HOUR. ANY LATENESS OVER ONE HOUR, WILL BE SUFFICIENT CAUSE FOR AN EMPLOYE'S DISCHARGE, AT THE DISCRETION OF THE FOREMAN.

CHECK TIME	Morning IN	Noon OUT	Noon IN	Night OUT	Extra IN	Extra OUT	STRAIGHT TIME

TOTAL RATE TOTAL

GANG EARNINGS OVERTIME

TOTAL WAGES FOR WEEK $

FIG. 41. Employe's Clock Card

To be used for "ringing in" on time clocks the time of beginning and departure of employes. The stub at the top is detached by the employe and used as a factory pass; is receipted and surrendered at time of wage payments.

numbers during the periods in which constantly changing employes are not on the pay roll; while employed, the employes' earnings cards in the pay roll unit should be kept by current clock numbers to facilitate posting thereon from the pay rolls, which latter are arranged in clock number order.

The employment record cards should be kept in the employment department in a "live" file by current clock numbers during the employe's period of service and thereafter transferred to an alphabetically arranged "dead" file. For quick reference purposes, an alphabetical index of current employes showing clock numbers is also necessary.

EMPLOYE'S RATE CARD.—The original and triplicate of the employe's rate card (Fig. 40) should be of thin cardboard and the duplicate of thin paper, so as to permit all three copies to be made at one typing. The originals should be sent by the employment department directly to the departmental time clerks where they should be filed by clock numbers and used as vouchers from which to transfer the rates weekly to the clock cards for the purpose of calculating the earnings of those employes who are paid on an hourly wage rate basis. The hourly rates should also be used on the clock cards of employes who may be paid under the "gang bonus" plan, to which reference will hereinafter be made. All employes should have hourly rates, notwithstanding the fact that they may be paid solely on a piecework basis, because there may be times when every employe will for short periods be paid on an hourly basis, because of stock shortage, waiting for machinery repairs, etc.

Duplicate of Rate Card As Notification of Hire.—The duplicate of the rate card acts as a notification of hire and should be sent to the addressograph unit supervised by the chief factory accountant. This unit should prepare an addressograph stencil of each employe's name and his master and current clock numbers. The stencil should also be used in the preparation of clock cards for subsequent pay periods, of envelopes for currency wage payments or of checks where employes are not paid in currency, and also in the preparation of the pay roll lists. The filing of the addressograph stencils by current clock numbers will enable the operators to readily prepare the pay roll lists by departments and sub-departments in such manner that separate totals can be made for each of such groups of employes.

Triplicate of Rate Card to Pay Roll Unit.—The third copy of the employe's rate card should have on the back the details of any definite understanding with the employe as to his rates, methods of payment, length of service, responsibility for tools, etc., and such a card should be signed each time an employe is hired (Fig. 40b). This triplicate should be sent directly by the employment department to the pay roll unit of the factory accounting department, for filing by current clock number and for use in checking the rates which form the basis for the calculation of the hourly earnings entered on the employes' clock cards. The actual calculating of the earnings may be done by comptometer or multiplying machine operators after the time and rate data on the clock cards have been furnished by the shop timekeepers. All timekeepers should be under the direct supervision of the chief factory accountant.

DEPARTMENTAL TRANSFERS OF EMPLOYES.—Preliminary verbal arrangements for transfers of employes from one factory department to another may be conducted between the various foremen or upon instructions of the divisional superintendents. It may also happen that the labor requirements of one department can be met by transferring employes who are being laid off in other departments. In any event, transfers of employes between departments should not take place independent of the employment department.

Original to Time Dept.

X. Y. Z. Co.

Departmental Transfer

Time and Pay Roll Dept: 9-30-1924

Transfer John J Doe

Present work Machine Opr.

Rate .50 Clock No. 45086 | Day Shift ✓ | Night Shift

From 450 Department

To 900 Department

Class of work Transferred to Time Clerk

Reason for Transfer Reducing Force in Dept. 450

Begining 7:00 A. M. ~~P. M.~~ 10-1-1924

Smith
Supt. Foreman

O. K. R.J. Negargle Foreman (Dept. Transfered to)

O. K. A. C. Wood Employment Department

O. K. M. J. Wallace Time Department

O. K. W. G. S. Pay Roll & Addressograph

New Clock No. 90010 New Rate Sal'y | Day Shift ✓ | Night Shift

Time on Old Clock Number	Yes	No ✓	Time on New Clock Number	Yes ✓	No

Clerk Issueing Transfer R. B. Jones Clerk of New Dept. S. L. Clark

Transfers are to be issued by Time Keeper only and this copy together with Employe's Rate Card forwarded immediately to Transfer Clerk.

FIG. 42a. Departmental Transfer Notice

Necessary as authority for the timekeeping department and pay roll unit for changing of pay rolls.

Duplicate to Employee

X. Y. Z. Co.

Departmental Transfer

Time and Pay Roll Dept: 9-30-1924

Transfer John J. Doe

Present work Machine Opr.

Rate .50 Clock No. 45086 | Day Shift ✓ | Night Shift

From 450 Department

To 900 Department

Class of work Transferred to Time Clerk

Reason for Transfer Reducing Force in Dept. 450

Beginning 7:00 A. M. ~~P. M.~~ 10-1-1924

Smith
Foreman

O. K. R. J. Negargle Supt. Foreman (Dept. Transferred to)

O. K. A. E. Wood Employment Department

O. K. M. J. Wallace Time Department

O. K. H. G. S. Pay Roll & Addressograph

New Clock No. 90010 New Rate Daily | Day Shift ✓ | Night Shift

Instructions To Employes

1- Have foreman of your present dept. sign transfer and insert reason for same.
2- Have foreman of dept. to which you are being transferred sign and fill in new day rate on transfer.
3- Turn in all tools and tool checks into your tool crib and secure release.
4- Take this copy of transfer to Employment Office for new clock number.
5- Report to your new timekeeper for clock card.

You Must Report to Employment Within Five Hours After Receiving Transfer.

FIG. 42b. Duplicate of Departmental Transfer

Showing the instructions to employes which must be observed before transfer can be accomplished.

The actual transfer should be covered by a form of departmental transfer (Fig. 42a), prepared by the foreman's shop clerk, or by the timekeeper in such departments as have no shop clerk. Even in cases where the transfer originates upon the suggestion of the employment department, the transfer form should be prepared in the shop department in which the employe is engaged at the time of transfer.

Data Required on Duplicate of Transfer Form.—The form itself indicates the data required before a transfer can be made. Fig. 42b shows the duplicate of the form. Both original and duplicate contain various instructions pertaining to their use. It should be noted that with respect to the department which an employe leaves, he is treated as one who is leaving the service, and that with respect to the new department, he is treated as if he had been re-hired after a period of unemployment. Thus, the employment record card, the employe's rate card and the clock card should be completed with respect to the old and new jobs, and the employe's name automatically taken from the pay roll in the old department and added to the roll in the new department.

CHANGE OF HOURLY RATE.—The employment manager should prepare **wage lists** from time to time, as changing conditions may warrant, showing the **classifications of the labor** in the shop and the **minimum and maximum hourly rates** which must be adhered to by the divisional superintendents.

CHANGE OF RATE

Date 11-3-23

Name John J. Doe Clock No. 44016

FROM	TO
Rate $.44 Per Hr.	$.46 Per Hr.
Class of Work Machine Opr.	Same
	Effective 11-5-23

J Comfort, Foreman — Dweglers, Supt. — C. Dawson, Employment

FIG. 43. Change of Rate Slip
Being authority for changing of employe's wage rates.

Foremen should be allowed some discretion as to the changes in rates within the limits specified for the various classes of labor, subject, however, to the supervision of the divisional superintendents. When a change is in order, a change of rate slip (Fig. 43) should be prepared by the foreman, submitted to the divisional superintendent for approval and then sent directly to the employment department, where it should be checked against the maximum rate shown on the last previously issued rating list, approved by the employment manager, used as a basis for changing the employment department

records and then sent to the pay roll unit of the factory accounting department. The latter unit should use the change of rate slip as authority for changing the rate cards and for notifying the departmental time clerks of the change; thereafter the change of rate slips should be filed as vouchers in the pay roll unit according to current clock number.

DISCONTINUANCE OF EMPLOYMENT.—Irrespective of whether shop employes quit voluntarily, are discharged or laid off, the information should first be communicated to the departmental time clerks. The latter should then prepare **pay off slips** in duplicate, similar to the form shown in Fig. 44. The original gives the data pertaining to the employe, a record of his ability, character and deportment and a memo as to whether or not he is recommended for later re-hire. The reason for the discontinuance of service and the signature of the foreman is desirable so that the latter can insert any confidential data he may wish pertaining to the employe. In some shops it is the practice to have the divisional superintendent also sign these slips, so that he may know just what is going on in his various departments.

Handling Employe Records on Discontinuance of Employment.—After being properly filled out, the original of the pay off slips should be sent directly to the employment department where the employe's record card should be removed from the live file and held until the duplicate of the pay off slips is received from the pay roll unit, after which the record card should be transferred to the dead file and the original pay off slip filed in the employe's record envelope (later reference will be made to this envelope). The employment department should act as a check on the pay roll unit if the duplicates of the pay off slips are not received in due course. The duplicate of the pay off slip need not show the shop record and confidential data called for by the original, as the pay roll unit is not interested in the shop record of an employe or the reasons for his leaving.

Time Clerks Function.—The time clerks should send the duplicate of the pay off slip directly to the pay roll unit together with the employe's clock card and any job tickets covering the time of the employe for the current week. The time clerk's copy of the employe's rate card should be sent directly to the addressograph department so that stencil of the employe's name and number may be removed from current pay roll stencil files after the close of the pay period in which the employe was last in service. Thus, when the next pay roll sheets are printed, the paid-off employe's name will not appear.

Pay Roll Unit's Function.—In the pay roll unit the earnings of the employe should then be calculated on the clock card, the pay roll unit's copy of the employe's rate card stamped with the date and the fact that the employe has been "Paid Off" and similar stamp impression made on the duplicate of the pay off slip. The employe's clock card, together with duplicate copy of pay off slip, should then be sent to the paymaster. The employe's rate card should be sent to the addressograph department to be checked against the copy of the employe's rate card previously sent in by the time clerk, to be sure that employe's name is removed from the pay roll.

The paymaster, after receiving the "tool clearance" should pay off the employe and lift the latter's receipted clock card stub. Thereafter, the duplicate of the pay off slips should be sent to the employment department. If it is the practice to pay all employes by check the paymaster will doubtless have a bank account of a stipulated amount on which to draw checks. If payments are made in currency, an imprest petty cash fund in the hands of the paymaster should be used.

Pay Off Slip

ORIGINAL

(To Employment Dept.) Date 1-3- 1924

Clock Number 44016 Dept. Number 440

Name John J. Doe

Has — Quit Voluntarily [X] / Been Discharged [ ] / Been Laid Off [ ]

Pay to 4.30 ~~a. m.~~ p. m. 1-4-1924

At — Day Rate [ ] / Gang Rate [X] / Piece Rate [ ]

Time Dept.
Time Dept.

Shop Record

Must be filled out by foreman

	Excellent	Fair	Poor
Ability	X		
Character	X		
Deportment	X		

Would you recommend re-hiring later

Yes [X]

No [ ]

Confidential

Foreman must give below reason employee has been discharged or is leaving.
NOTE: This information will be given out only by Employment Manager.

Secured a better position elsewhere. Gave three days notice

S. Comfort
Foreman

J. B. Swegles
Superintendent

FIG. 44. Pay Off Slip

Comprising instructions to employment department and paymaster and furnishing data to be considered in connection with later re-hire application.

Filing Records of Employes.—An employe's record envelope, of heavy manila stock, may be kept for filing the pay off slips and any other data relating to the employe which the employment department feels it desirable to retain. Any size of envelope can be used which will be large enough to hold the data to be filed therein. The employe's name should appear on front at the top of the envelope, as this will necessarily be filed alphabetically when the employe has discontinued his services. Inasmuch, however, as it is often necessary to refer to the data while employes are still in service, it desirable to provide space on the face of the envelopes for listing the current clock numbers of the employe. Envelopes of current employes may then be filed by clock number.

PAY ROLL ORGANIZATION.—The financial manager of a corporation should be charged with full responsibility for the planning and carrying out of the methods to be used in gathering the basic pay roll data in the shop, in reporting it to the Pay Roll Unit, in preparing the pay rolls and in paying off the men. Obviously, he must have under his direct control not only the pay roll clerks and addressograph operators who actually prepare the rolls, and the check writers if the men are paid by check, but also all shop timekeepers and operation counters who must be depended upon to supply the data from which the employes' earnings are to be calculated.

In large organizations the financial manager will find it desirable to maintain a **separate factory accounting department** in charge of a **chief factory accountant** with separate units for material costs, labor costs, pay roll and timekeeping.

Responsibility of Various Units.—Responsibility for the work of the pay roll unit should be concentrated in a chief paymaster. That for the timekeeping and piece work or other production data upon which earnings are based should be concentrated in a **chief timekeeper.** This would include principally the departmental shop timekeepers and operation counters. Even in cases where clerical work is required to be done for shop foremen, shop clerks who spend any portion of their time on timekeeping or production data for wage purposes should come under the direct supervision of the chief timekeeper.

Time Study and Rate Setting Departments.—Where piece work rates, production premiums or gang rates obtain, it is usually necessary to maintain a time study or rate setting department, which should report directly to the factory manager. This department will be found to be a distinct asset or a very active liability depending upon its efficiency and fairness in its time studies, in its setting of the rates and its co-operation with the planning department of the factory and the pay roll unit. A time study and rate setting department cannot function independently of the timekeeping and pay roll units.

Timekeepers.—The timekeepers are the departmental shop clerks who receive from the employment department the employes' rate cards and data with respect to the engagement and discontinuance of employes, and who either keep time records of the employes or see that the clock cards are stamped by each employe when entering or leaving the building. It should be their business to see that they receive from the addressograph department new clock cards for each pay period and that these cards are inserted in the racks adjacent to the time clocks for the employes to ring when coming in or leaving the plant. At the end of each pay period the timekeepers should gather all the clock cards, insert the hourly rates thereon and send them to the comptometer operators in the pay roll unit for the purpose of calculating the earnings of those employes whose earnings are based upon an hourly rate. The timekeepers should also gather from operation counters and other shop employes

all production and other data necessary for calculating the wages to be paid to employes working on bases other than hourly rates.

Addressograph Operators.—Addressograph operators are indispensable to the smooth working of the pay roll unit in large factories. Through the medium of duplicates of rate cards from the employment department covering new employes and the stamped triplicate of the rate cards from timekeepers covering the employes who are leaving, the addressograph operators are put into possession currently of complete data for maintaining a departmentalized file of metal stencils covering the name and clock number of all current employes. From these stencils the addressograph operators can prepare the weekly pay roll lists and the wage currency envelopes or checks, as the case may be; they can also run off at any time lists of the employes in any one factory department or division, for the use of the auditor in checking men actually on the jobs.

WAGE PAYMENT PLANS.—Even if each employe were to deliver, "an honest day's work for an honest day's pay" there would still be wide divergences between individual production. Variations in physical ability and endurance as well as in individual skill, would affect production. Management will always remain a vital factor in production; often it is a retarding factor due to its neglect to provide proper and complete instructions, modern machinery and efficient supervision. Wasteful plant lay-outs and the failure to develop various parts of the organization so as to insure a constant flow of materials in such quantities as to permit uninterrupted production might also be classed as poor management. It seems to be a pretty generally accepted fact, however, that even if management were perfect, labor needs incentives of some kind to bring out the best in each individual workman and as a result the bases for payments to employes have never ceased to furnish interesting study, and many plans have been developed. It is not the purpose to describe in detail various wage bases, as they form a part of shop management rather than of financial control; nevertheless, an understanding of a few of the more important fundamental considerations may serve to stimulate further research.

Hour Wage Rate.—Irrespective of the wage payment plan which is finally adopted, an hourly rate must be given each employe so that he may be paid upon the hourly rate basis during periods in which he may be waiting for stock or machine repairs, or in which he may be performing some special service for which the time study department has not yet provided a rate. The variation in hourly rates should give expression to the diversified skill of employes or to the relative values of the work to be performed.

Piece Rates.—The term "piece rate" is usually applied to the unit rate to be paid an employe for the performance of a specified amount of work on a unit or number of units of production. Since piece rates are usually fixed with the idea of enabling a normal employe at average speed to earn an average weekly wage (varied according to the skill required) there is no material difference between hourly rates and piece rates as the basic wage.

Both hourly rates and piece rates are the result of attempts to establish the same ultimate weekly reward for an expected amount of work and either of these rates may have premiums or bonuses for production in excess of a specified daily minimum or standard.

Bonus Plans.—Bonus plans are many and varied. Their object is to hold forth rewards which will act as incentives for employes to produce various results above the average. Thus, there may be bonuses for production in excess of a standard requirement within a given period; these may apply to production by an individual, by a small group or "gang" of individuals on

like or allied work, or by an entire department. In other cases individuals or groups of employes might be treated as sub-contractors and receive bonuses for the performance of given tasks in a shorter space of time than a pre-determined allowance period. **Premium plans** laying special emphasis upon the quality of production and upon the economical use of tools and supplies have also been tried. **Profit sharing bonuses** based partly upon length of service and partly on other production bases are used with the object of keeping labor turn-over down to a minimum.

All of these plans are incentives for the purpose of encouraging employes to do more or better than average work and with less loss of material and supplies, than would be expected from average employes without such incentives. In many cases labor has been suspicious of such incentives because too often has their co-operation been met by cuts in wages and bonuses. Where, however, the management has treated the employes according to the "golden rule" and the incentive plans have not been changed so as to result in abuse thereof, the result has been that employes have earned more and co-operated better, while the mangement has had its production increased and produced at less cost than before the introduction of such plans.

"GANG" OR GROUP BONUSES.—As there are many technical books on shop management which can be read with interest and profit by those wishing to pursue further study of the various methods of wage payments, it is not the purpose to enlarge thereon here. However, inasmuch as the reading of a number of such works has failed to reveal a description of a modern "gang" or group bonus plan, such as is now actually in successful use in some large continuous standardized production factories, detailed reference will be made thereto.

Where group bonuses are mentioned in other works, it would appear that the thought in mind was to provide bonuses of equal amount to be paid to each of the employes in a department, or subdivision thereof (known as a "group" and doing related work), according to the efficiency of the group as a whole, and no mention is made of certain important factors without which a "gang" bonus plan cannot be satisfactorily operated for an extended period, and will in time only cause dissatisfaction among the employes.

Variance Between Members Under Group Bonus Plan.—In every group there is bound to be a variance between the hours of attendance of the employes, as well as between the skill required of each. The clock cards of each employe showing the actual attendance will give expression to the varying hours worked by each group member. Varied basic hourly rates should express the difference in skill required; thus, in the final assembly department of an automobile manufacturing plant, for example, men who attach enameled and highly finished fenders should have a higher hourly rate than women who assemble small parts. The consistently productive work, however, of all classes of employes in a group is vital to the success of the "gang" bonus plan. Working foremen of small gangs can be given a higher hourly rate and participate in the gang earnings; where this is done, foremanship ceases to be an expense and is practically productive labor.

Basis of Group Bonus.—Where a group plan is applied to a sub-department in which all of the employes perform the same operation on the same kind of product on similar machines, the principles are the same, although this condition simplifies the use of the plan because the hourly rates should be identical. In such cases, the plan is valuable principally in encouraging co-operation

among the gang members and in providing an incentive for all to turn out maximum production with minimum spoilage.

Basis of Gang Bonus.—The gang bonus, instead of being a definite allowance to each employe of the same amount for excess production, should be applied on the basis of a percentage bonus of the earnings as calculated on the hourly rate basis, as it is only by the distribution of the bonus on such a basis that that bonus will be so paid out as to give expression in individual cases to the differentiation between the hours of attendance and the skill required.

An important element in the gang bonus plan is the setting of a labor rate to be allowed as a wage basis for each unit of good final production turned out by the entire gang. Thus, no labor expense is involved for spoilage during any operation performed by any member of the gang, while under an individual piece work plan payment would be made for labor on operations prior to that in which the material was spoiled.

It should be noted that the wage allowance is for each unit of production by the entire group and not merely for an excess of production over a specified minimum. The rate setting department should, of course, decide upon the wage allowance. It is interesting to note, however, that where the gang system is in use, the rate itself automatically expresses the unit cost and this simplifies the work of the labor cost unit. Furthermore it is less expensive inasmuch as no individual operation counters need be employed and no individual piece work data kept.

The calculation of the individual earnings of gang members is much simpler than would at first seem possible, as all that is necessary is to prepare a pay roll sheet for each gang on the basis of the actual attendance and basic hourly rates and then calculate the labor allowance to the whole group for all of the production during the pay period. The excess of the aggregate allowance over the total hourly earnings of the group is the basis for determining the percentage of bonus earned by the entire gang; this rate of bonus is then applied to the previously calculated hourly earnings of each member of the group.

Typical Gang Report.—Fig. 45 is a typical gang report. The daily hours of labor on the gang work and the hourly rates are filled in by the departmental timekeepers. The earnings on the hourly basis, the total earnings of the gang, the percentage of gang bonus to be applied to the gang members, and the earnings of each member of the group after applying the bonus, are all calculated in the pay roll unit. The gang report which is shown indicates that thirteen men comprised Gang No. 410G on crank shaft machining operations and that one man (No. 41034) was a beginner and entitled to receive his pay on an hourly rate basis only for the first week. It should be noted that the pay of such workers on the hourly basis is first deducted from the total gang earnings before the bonus is distributed to the other gang members. The first man on the gang report is a foreman, at a comparatively higher hourly rate, and since he shares in the gang earnings, his services are practically productive labor and not overhead expense.

Gang Production Report.—The gang production report at the bottom of the form is the basis for ascertaining the amount of the total earnings; the report shown indicates that the gang produced 1,204 units for which the rate setting department had fixed a rate of $40.85 per 100 units, thus making the total gang earnings $491.83. As a result of the operations of the gang, the twelve men sharing in the bonus, who ordinarily would have received an average rate of 46.5 cents per hour, actually earned 92.2 cents per hour, and the ratio of

GANG REPORT

SHEET No. *1*

GANG No. *410G* GANG NAME *Crank Shaft*

WEEK ENDING *5-17-25*

Clock Numbers	DAILY HOURS BY INDIVIDUAL EMPLOYES						TOTAL HOURS	Hourly Rate Basis	Earnings at Hourly Rate		Gang Earnings	
	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.						
41009	9	9	9	9	9	4.50	49.50	55	27	23	54	02
10	10	10	11.25		10		41.25	47	19	39	38	47
20	10	10	11.25	11	10		52.25	42	21	95	43	54
23	9	9	9	9	9		45	45	20	25	40	17
24	9	9	9	9	9	4.50	49.50	47	23	27	46	16
25	10	7			10		27	46	12	42	24	69
26	9	9	9	9	9	4.50	49.50	47	23	26	46	14
27	10	10	11.25	11	10		52.25	50	26	13	51	89
28	9	9	9	9	9	4.50	49.50	47	23	26	46	14
29	9	9	9	9	9	4.50	49.50	45	22	28	44	23
30	10	10	11.25	11	10		52.25	40	20	90	41	46
32				10			10	47	4	70	9	32
34	Learn	er—H	ourly		10	4	14	40	5	60	5	60
	Rate	First	Week									
						Men						
Totals						13	541.50		250	64	491	83 (a)
Less, Learners on Hourly Rate only						1	14		5	60	5	60
Balance to be Apportioned to Gang							527.50		245	04	486	23
Average Rates per Hour						12		46.5				92.2
Ratio of Gang Earnings to Hourly Rate Earnings												1.9843
Adjust Gang to .... Per Cent												
Total to be Distributed to Gang After Adj.												
Average Rate per Hr. After Adjustment												
Adjusted Percentage of Gang Earn. to Day Earn.												

Used only if, because of circumstances not the fault of the gang, the gang earnings are so low that an adjustment is in order.

GANG PRODUCTION REPORT

Part No.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	TOTAL	Rate per 100	Gang Earnings
22798	224	221	231	225	229	74	1204	40.85	491.83 (a)

FIG. 45. Gang Bonus Report

Showing method of calculating and distributing bonus to a group of employes working on a group bonus plan which is flexible enough to allow for differences between hours of attendance and skill of the individuals.

actual gang earnings to the hourly earnings was 1.9843, which is equivalent to a bonus of 98.43%.

Summarized Schedules of Gang Reports.—Summarized schedules of all gang reports should be prepared weekly in the pay roll unit for submission to the divisional superintendents and factory manager, setting forth the number of employes in each gang, the average hourly rate, the actual gang rate paid and the percentage of gang bonus. In the actual operation of the gang bonus plan, especially in cases of interruption to production or the development of a new kind of production, the men on the gangs may not actually earn a bonus but will have to be paid an arbitrary bonus in order to compensate them for failure to earn the bonus through no fault of their own; in no event should any employe be paid less than his earnings at the hourly rate. Arbitrary allowances of this kind should be treated as overhead expense. Such unusual circumstances should be specifically earmarked and covered by notations on the summarized gang report schedules sent to the management.

CALCULATION OF WAGE EARNINGS.—

On Hourly Basis.—The calculation of individual wages on an hourly rate basis is comparatively simple; the clock cards will show the attendance of each employe and the rates inserted thereon by the timekeepers furnish the data for the comptometer operators in the pay roll unit to calculate each employe's earnings. In organizations where supplemental time reports (hereinafter referred to) are required from every employe, a **"Pay Period Summary"** similar to Fig. 46 will be found helpful in summarizing all the time chargeable to each job or shop order. This summary may be used for calculating each employe's earnings on an hourly basis and because it summarizes all the time spent by the employe on each order during the week, it will reduce the work involved in clerical distribution of the pay roll to the various orders.

On Piece Work or Bonus Basis.—Where piece work or any bonus plan is in use, production records must be kept by the various timekeepers or operation counters who in turn should send their data weekly to the chief timekeeper. In the latter's office these data should be checked and verified in so far as possible and calculations made of the earnings or bonuses of individuals or groups to whom those special rates apply. The plans for checking the data will of course vary with the basis of payment, but all plans should provide for the keeping of checking sheets covering consecutive numbers of large units of production and the posting thereto under various columns for each operation of the dates on which the operations were performed by employes paid at individual piece rates. Where possible, reports of production transferred from one department to another, inspectors' reports of quantities or weights, and similar data with respect to production reported from sources other than departmental timekeepers should also be considered in planning for testing the correctness of the production used as the bases for wage payments or bonuses to individuals, groups or departments.

Methods of Facilitating Reports on Piece Work Basis.—To facilitate the reporting of production in cases of operations paid for on an individual piece work basis, systems of consecutively numbered coupon strips have been used. The coupons strips are printed so that coupons describe the operations in routine order and refer to them by number; they may be filled in by the employes as to their clock number and date of performance and retained in an envelope to be turned over to the timekeeper either daily or weekly. Such coupons, which may be used to represent work done on one unit or on any specified multiple of units, can be readily sorted and checked in the timekeeping office,

PAY PERIOD SUMMARY

Name L. Shipley Clock No. 21702

Period Ending October 1, 1925 Hourly Rate 60¢

Shop Order or Part Number	Dept. Charge or Op. No.	Rate Per Hundred	Prod.	HOURS WORKED														Total Earnings	
				Sun.		Mon.		Tues.		Wed.		Thur.		Fri.		Sat.		Total			
E 1121	780					6	50			4	50			3				14	-	8	40
"	560					2		5				3	50			1	-	11	50	6	90
"	440						50					3	-	5	-		50	9	-	5	40
E 1002	590									5	-			1	-			6	-	3	60
B 442 5								4	-							3	50	7	50	4	50
E 1159	960									1	25	2	50					3	75	2	25
Totals						9	-	9	-	10	75	9	-	9	-	5	-	51	75	31	05

FIG. 46. Pay Period Summary

Showing method of summarizing daily supplemental time reports of individual employes and of calculating wages for entire week chargeable to each job or shop order.

before preparing the earnings of each employe. Other systems provide for weekly cards to be issued to each employe on which inspectors can punch the production in spaces provided therefor; these cards may then be turned over weekly to the timekeeping department for preparation of the employes' earnings.

The use of containers designed to carry a specified quantity of production units as they move from one operation to another will be found helpful in assisting operation counters in preparing their reports to the timekeeping department of work performed on a piece work basis in cases where no coupon system is practicable. Where machine work is performed of a continuous nature, automatic counters can be placed on the machines.

SUPPLEMENTAL TIME REPORTS.—Individual supplemental time reports must be prepared by the timekeepers for employes who perform work chargeable to individual job or shop expense orders for which they are to be paid on an hourly rate basis and the departmental timekeepers should turn in to the chief timekeeper time reports distributing to job or **shop orders** all of the time each employe has shown on his clock card for the same pay period. This may apply to entire plants operating on a job work basis and even to departments in factories whose principal production is of a continuous and standardized nature. In plants using **job orders** for production work, such supplemental reports are necessary for all the time of all the shop employes.

Individual supplemental time reports for each employe must also be prepared by the departmental timekeepers, and approved by the foreman, for hourly rate allowances which may be made to men who ordinarily are on piece work or gang work, but who, because of shortage of stock, breakdown of machinery, or for other reasons, may be temporarily idle, or who may be assigned to temporary special work on an hourly rate basis. The special work should be covered by shop or job orders and the time reports so specify. With the use of a numbered classification schedule of the reasons for special allowances, it can be required that the time reports specify one of such reasons; weekly summaries of the allowances can then be prepared in the chief timekeeper's office and checked in the pay roll unit, after which the summaries can be sent to the divisional superintendents and factory manager for the purpose of controlling such expense.

However these plans may be worked out in individual cases, it is important that there always be present a provision that the pay roll unit also receive first hand production reports from the various factory departments and that the data used and calculations made in the chief timekeeper's office be audited and checked in the pay roll unit before the earnings of individual employes are transferred to the clock cards prior to preparation of the pay roll itself.

OVERTIME BONUSES.—The requirement should be set that overtime bonuses will be paid only after approval of special time reports by foremen in the case of each employe for each day and subject to blanket written authority by the divisional superintendents to the foremen. All factory gates should be closed at regular closing time, with the exception of one through which all employes who work overtime should be required to pass out and ring their clock cards on a time clock with a ribbon of special color and leave them in an immediately adjoining locked box, from which the night timekeepers should later remove the cards and replace them in the regular racks. This is a check upon the actual attendance of the man after regular hours.

PREPARATION OF PAY ROLL.—If the employes have been assigned consecutive numbers according to departments and sub-departments, the pay roll lists of those paid on an hourly, daily or weekly basis can be prepared from

time records even though the amounts of the wages may be actually determined by the hourly attendance or the quantity of production. Each employe should be issued a clock card upon being hired and a new clock card each week thereafter, so that the time of beginning and discontinuing work each day may be recorded thereon, either by insertion in a registering time clock, or by a timekeeper or foreman in cases of construction work where no other method is practicable. A mechanical method of recording the time is less expensive, more accurate and less subject to abuse and fraud than a purely clerical timekeeping plan.

If the basis of payment is other than a flat hourly attendance rate, a separate record of the data upon which the earnings are based must be kept currently by the timekeepers. In order to simplify the preparation of the pay roll, however, the total earnings of each employe should be transferred to the clock card at the end of each pay period in the pay roll unit from the production and earnings data received from the shop clerks, operation counters or timekeepers. The total wages of each employe as shown by the clock cards should then be posted to the previously prepared pay roll sheets after the calculations of the earnings have been checked.

In organizations employing a large number of men, the pay rolls may be prepared by mechanical devices. Addressograph stencils giving the employe's number and name, should be made at the time of original hire and the pay roll sheets for each period printed from such stencils.

Verifying Computations of Pay Rolls.—All employes' earnings and the pay roll lists should be checked by clerks or comptometer operators other than those who make the original calculations. It is also advisable to make a triple check of the entire pay roll by totaling each of the three computations, viz., the clock cards from which the pay roll is prepared, the pay roll sheets and the pay envelopes or checks, and proving one against the others.

PAY ROLL CONTROL.—Proper methods and records with respect to the **hire, attendance and discharge of employes** are partial insurance that the names of only such employes are added to the rolls as are regularly engaged and are in attendance during working hours, and that upon discharge the names are promptly removed from the rolls.

Another control is furnished through a comprehensive study of a **departmentalized pay roll summary,** with subdivisions of the departments so arranged that the foremen, the divisional superintendents and the factory manager can "size up" the actual condition therefrom and investigate whenever anything appears to be radically wrong or "out of line" as compared with previous rolls, or with the actual factory or departmental performance as a whole.

The extent to which such a summary is really valuable as a "control" depends upon the number of subdivisions shown on the summary and the extent to which the distribution classifications and other data are shown thereon.

A summary is more valuable if in addition to being merely a list of the departments and the wages paid to all the employes therein, it be arranged to show the number of employes and the average earnings; also, a classified distribution of the earnings, such as direct labor, overtime bonus, idle time allowances, plant extensions, foremanship, special shop orders, expense orders, etc. If totals of approximate production during pay roll periods can be applied to the rolls to show broadly the average costs (either with or without any of the items other than direct labor) an index figure may be obtained which may be helpful in furnishing comparisons between rolls. In plants,

departments or groups conducting operations of continuous and similar nature, such data has been found valuable in controlling pay rolls. (See Figs. 4 and 5.)

Pay Roll Audit.—The auditor, or a representative of the financial manager, is also vital to adequate control of pay rolls. From time to time he should take the clock cards covering the current pay roll and check the men while actually at work in one or more departments and investigate absentees to make sure that bogus names are not carried on the roll. The entire roll should be covered in this manner not less than once per annum and departments which change frequently should be checked oftener. Test audits should also be made, without notice, of petty cash pay-offs and of the various bases for wage payments used by the timekeepers and pay roll unit.

PAY ROLL DISTRIBUTION.—

Productive Labor.—All wage payments covering work done on production material come under the head of direct labor on the pay roll summaries. Where such labor is paid for on the basis of piece work, gang bonus or other rates based upon quantities produced, the unit cost of production is a known factor. Where payments for direct labor are on an hourly basis, unit costs can only be ascertained in the cost department by applying the actual production to the wages classified according to operations, groups or departments performing the same work.

Non-Productive Labor.—In all factories a certain portion of the labor is of a constantly recurring non-productive or expense nature. One of the most practicable and simple methods of controlling this expense currently is to provide that supplemental time reports of the employes engaged in such work be charged to one or more of a series of numbered standing expense orders issued to the shop timekeepers for this purpose. Where certain of these expenses are common to all departments, the time reports of the men charging their time to such expense orders will show the same expense order number. The pay roll summary should be classified departmentally and a special column provided for "Expense Orders."

Special Shop Orders.—Special shop orders to which have been assigned a series of numbers not conflicting with expense orders may be used for the manufacture of tools and for other special work in the factory in connection with the construction or installation of machinery and equipment. Even in a job shop it is well not to issue production job orders for this purpose, as such expenditures can be better controlled if the time reports of the men working thereon are charged to such special shop orders and all pay roll summaries provide a separate column therefor. The timekeeping department will in its distribution have to furnish the cost department with the total charges during each pay period to each of these special orders.

Overtime Bonus.—The excess payments over regular wage rates as overtime bonus should be treated separately on all records and be shown in a separate column on the pay roll summaries. Where work is done for customers on job production orders, it is important that provision be made that all job tickets, time reports and job costs sheets provide separate colums for posting overtime bonus, so that the charges to the customers can be calculated accordingly.

Entire Pay Roll Charged to "Accrued Pay Roll."—The entire pay roll should be charged to an accrued pay roll account on the general ledger. The pay roll unit should prepare a weekly distribution of the entire roll at the end of each pay period according to the various controlling accounts kept in the factory ledger in the cost department, such as "Direct Labor," "Standing Ex-

pense Orders," "Special Shop Orders," etc. By the use of columnar schedules, flexible time report files, subsidiary order ledgers, or card punching and tabulating machines, the pay roll unit should gather currently under individual shop orders or subsidiary expense orders, all labor chargeable to each of the subsidiary accounts. At the end of each month these data, arranged on separate schedules for the orders covered by each controlling account kept in the factory ledger, should be sent to the cost department where it should be used for detailed posting to the various production job orders, standing expense orders and special shop orders and also used as the basis for preparing monthly skeleton journal entries for the general accounting department to distribute the pay roll by crediting the accrued pay roll account and debiting the various asset accounts, expense accounts or factory ledger controlling accounts.

PAYMENT OF WAGES.—

By Paymaster if at One Place.—Irrespective of whether cash or checks are used, payment of wages should be made by a paymaster who has had no connection with the preparation of the pay roll and who is responsible directly to the comptroller or treasurer. This is practicable only where all the wages can be paid out at one disbursing point.

By Pay Clerks at Different Places.—If many employes must be paid off in a short space of time on a specified pay day, the establishment of a number of departmental pay stations throughout the plant may be found desirable. Where this practice is adopted, two pay-off clerks should be assigned to each station, both for protection and for speeding up the work. The departmental foremen should require the men to "line up" in clock number order; then one clerk can collect the receipted clock card stubs and call out the numbers as a guide to the other to disburse the wage envelopes or checks.

Frequent Changes in Assignments of Pay Roll Clerks.—It is important, however, if pay roll clerks are used for this work, that they be assigned to pay employes in departments whose wages they have not prepared, and that frequent changes be made in assigning the clerks to the pay stations, so that no one knows his assignment until just before the actual pay-off time. Wages should not be delivered to foremen for distribution to employes.

Audit Immediately After Pay Off.—The auditing department, or in the absence of an auditing department, a representative of the financial manager, should require the paymaster to account for the distribtuion of the cash or checks immediately after the expiration of the limited time specified for the paying of wages, and the paymaster should turn over either the receipted clock card stubs or undistributed envelopes or checks which the auditor can check against the pay roll. In cases where the pay roll is distributed through a number of pay stations, the time of distribution is usually very short and upon completion of the work at each station the pay-off clerks should be required to report at once to the auditor's office and similarly account in receipted clock card stubs or undistributed wages for all the envelopes or checks originally delivered to them.

Payment of Employes not in the Plant.—Provision should be made so that employes who are not in the plant during regular pay roll periods can within twenty-four hours thereafter receive their wages at the auditor's office in exchange for their clock card stubs and satisfactory explanation of their absence. Wages not called for after such period of grace should be listed and redeposited in the current bank account and applied to an "Unclaimed Wages" account. Employes subsequently making demand for such unpaid wages can be referred

to the paymaster and paid from a petty cash fund upon production of the proper credentials.

PAYMENTS IN CASH.—Many plants still prefer to pay in currency on account of the difficulties sometimes encountered by employes in cashing their checks. Where the number of men employed is too small to justify the use of check printing, check writing and signature machines, the cash payment plan is simpler. From the completed pay roll sheets a calculation can readily be made of the exact number of bills and coins of each denomination which will be required and for which the pay roll check will be drawn on the bank.

If the pay roll covers a large number of men, it is well to have the roll divided into several sections, so that a separate currency and coin list may be prepared for each, thus facilitating the location of any errors which may be made when filling the pay envelopes.

Pay roll robbery insurance should be carried to cover the total amount of the pay roll while being transported from the bank to the factory and while being distributed to the employes.

PAYMENTS BY CHECK.—Many corporations now pay all employes by check instead of in cash as the check payment plan relieves paymasters from the hazardous duties of transporting large sums of cash from the bank and handling it while almost surrounded by many men when paying off. The use of checks also furnishes employes with a point of contact which enables progressive banks to encourage them to open savings accounts. It is a generally accepted fact that thrifty employes make more dependable workmen.

If a system of payment by check is properly planned, it will be found to be more economical than the cash payment method. Where addressograph stencils are used in the preparation of the pay roll sheets, the checks can also be prepared therefrom. Check writing and signing machines reduce very materially the time required for completing the checks.

Reconciliation of Pay Roll Bank Account.—Reconciliation of bank accounts covering wage payments may be simplified if the checks are written in order corresponding to the names on the pay roll sheets and the employes' numbers are shown after their names on the checks, as the need for posting check numbers to the pay roll is thus eliminated; the outstanding checks may easily be identified by referring to the clock number of the employe whose name appears on the check preceding or following the missing number.

Pay Checks Stamped "Void thirty days from date."—It will be found desirable to have a printed provision on the checks that they will be "Void 30 days from date." This will encourage their prompt use and will enable the opening of a separate bank account for the checks of each pay period; thus, if weekly payments are made, the bank accounts may be numbered to correspond with the number of the week commencing with No. 1 for the first week in January and continuing through to No. 52 for the last week in December. These account numbers can be printed in large type upon the face of each check from the same addressograph stencil as is used for inserting the date.

SALARY ROLLS.—

Executives and Office Employes on Salary Rolls.—Executive and office employes, and in some cases shop foremen also, are ordinarily engaged on a monthly rate basis and paid by check. When this practice obtains, the roll covering their salaries is usually kept in the general accounting department under the direct supervision of the financial manager.

In some cases it has been found desirable to have the financial manager

himself keep a special small salary roll covering department heads and executives only.

Additions to Salary Rolls.—Additions to salary rolls should be covered by a Notice of Employment form, setting forth the name and address of new employes, their department, salary rate and time of starting. Such form should be signed by the department head and approved by the general manager in the case of office employes and by the divisional superintendent and the factory manager in the case of shop foremen.

Change of Rates on Salary Roll.—Separate forms covering change of rate and salary roll clearance should be provided to give pertinent data with respect to the amounts and dates of change or the discontinuance of employes. These forms, which should require the same signatures and approvals as the notice of employment form, will furnish the accounting department with authority for changing the rate and for removing employes from the roll.

Record Cards.—A record card for each person on the salary roll may also be kept for posting thereto all data with respect to employment and rate changes. These cards will be found valuable for reference, even after an employe's name has been taken from the roll.

Audit of Salary Rolls.—Since it is usually the case that persons on the salary roll are not required to use clock cards to record their attendance, it is desirable for the auditor or a direct representative of the financial manager to occasionally check up the parties on the salary rolls while at their work, or pay them at their desks, in addition to having the department heads approve quarterly lists of the department employes and their rates; otherwise it might be possible for employes to be dismissed, and through oversight or collusion, their names be continued on the rolls.

When Clock Cards Are Used to Check Employes on Salary Basis.—If clock cards should be used for checking the attendance of employes on a monthly salary basis, the cards should be of a different color, or should have a corner clipped or otherwise bear an identifying feature so as to automatically cause them to be rejected by the timekeeping department or the pay roll unit when preparing pay rolls.

A more desirable plan for handling the salaries of foremen or others to whom clock cards are issued, would be to assign to them numbers in the series alloted to their department and to give them a weekly rate and pay them on the regular weekly pay rolls. If office employes are handled in this manner, a separate series of clock numbers should be assigned to each office department, thus insuring separate grouping on the weekly pay rolls.

SECTION 6

BUSINESS LAW

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SECTION 6

BUSINESS LAW

Law of Contracts

DEFINITION.—A contract is "an agreement upon sufficient consideration to do or not to do a particular thing." (2 Blackstone Commentaries, p. 442.) A more complete definition is: "A bargain or agreement voluntarily made upon good consideration, between two or more persons capable of contracting to do, or forbear to do some lawful act." (*Justice* v. *Lang*, 42 N. Y. 493.)

THE ESSENTIALS OF A CONTRACT.—The essential elements required to make a contract enforcible at law are (1) agreement, (2) consideration, (3) parties legally competent, and (4) lawful subject matter.

1. AGREEMENT.—Agreement or mutual assent, which is the result of an offer and acceptance, is necessary for every contract. "Mutual assent is assent to the same thing in the same sense and under a common understanding of the stipulations agreed to." (*Martin* v. *Thrower*, 3 Ga. A. 784; also *Fire Ins. Assn.* v. *Wickham*, 141 U. S. 564; *Harper* v. *Goldschmitt*, 156 Cal. 245; *Harlow* v. *Curtis*, 121 Mass. 320; *Emerson* v. *Pacific Coast etc. Packing Co.*, 96 Minn. 1; *Livingston* v. *Livingston*, 173 N. Y. 377; *Teesdale* v. *Bennett*, 123 Wis. 355.)

Agreement Involves Meeting of Minds.—The meeting of the minds of the contracting parties is one of the essential elements in a contract. (*Hooley* v. *Talcolt*, 129 App. Div. [N. Y.] 233.)

What Constitutes Agreement.—To constitute an agreement there must be **a proposition by one party and an acceptance by the other,** which must be manifested by some appropriate act. (*White* v. *Allen etc.*, 126 N. Y. S. 150.)

OFFER.—Must be made with intent to create a contract on acceptance and be certain and free from ambiguity. The extent of the obligation is governed by the terms of the offer, for an acceptance is required to be identical with the offer made.

Offer Must be Communicated.—An offer must be communicated by word or conduct. The mode or manner is immaterial. (*The Palo Alto*, 18 Fed. Cases 10,700; *College Mill Co.* v. *Fidler*, 58 S. W. [Tenn.] 382.)

Revocation of Offer.—An offer may be withdrawn any time before it is accepted or the acceptance put in course of communication. (*Moffet* v. *Rochester*, 178 U. S. 373; *Martin* v. *Hudson*, 81 Cal. 42; *Corbett* v. *Cronkhite*, 239 Ill. 9; *Benton* v. *Springfield Y. M. C. A.*, 170 Mass. 534.) Where time for acceptance is given, it may still be withdrawn before the expiration of that time unless the agreement to hold it open for that time is supported by a separate consideration. (*Minneapolis etc. R. Co.* v. *Columbia Rolling Mills Co.*, 119 U. S. 149; *Schenectady Stove Co.* v. *Holbrook*, 101 N. Y. 45.)

Lapse of Offer.—An offer lapses so that subsequent acceptance will have no effect by

1. Expiration of the time for acceptance.
2. Expiration of a reasonable length of time where no time is specified.
3. Death or insanity of the parties before acceptance.
4. Dissolution of partnership before acceptance where one of the parties is a partnership.

ACCEPTANCE.—A contract results from the acceptance of an offer. "To accept a contract is to admit it and agree to it; to accede to it; to assent to it; the ordinary meaning embodies assent and agreement." (*State* v. *Columbus Public Service Board*, 81 Oh. 218; also *Laprade* v. *Fitchburg etc. R. Co.*, 205 Mass. 77; *Graff* v. *Buchanan*, 46 Minn. 24; *Chicago etc. R. Co.* v. *Dane*, 43 N. Y. 240; *Hall* v. *Wilson*, 6 Wis. 433.)

Who May Accept.—An offer can be accepted only by the person to whom it is made and is not transferable to another.

Public Offers.—Public offers of rewards, etc., from their nature cannot be made to a definite person and cannot become binding contracts until accepted, within the scope of the offer by some person. (*Schoestene* v. *Iselin*, 69 Hun 250; *Crowell* v. *Hopkinson*, 45 N. H. 9.)

Sufficiency of Acceptance.—"An acceptance must correspond to the offer at every point, and must conclude the agreement." (*U. S.* v. *P. J. Carlin Const. Co.*, 224 Fed. 859.) "An acceptance, to be good, must, of course, be such as to conclude an agreement or contract between the parties. And to do this, it must in every respect meet and correspond with the offer, neither falling within nor going beyond the terms proposed, but exactly meeting them at all points and closing with them just as they stand." (*Potts* v. *Whitehead*, 23 N. J. Eq. 512; also *Kincaid* v. *Eaton*, 98 Mass. 139; *Poel* v. *Brunswick-Balke-Collender Co.*, 216 N. Y. 310; *Baker* v. *Holt*, 56 Wis. 100.)

Communication of Acceptance.—An acceptance to consummate a contract must be communicated to the offerer or must be put in the course of communication by the acceptor. (*Cleveland etc. R. Co.* v. *Shea*, 174 Ind. 303; *Busher* v. *N. Y. Life Ins. Co.*, 72 N. H. 551.)

Revocation of Acceptance.—An acceptance can be revoked only by a communication to that effect before the acceptance is consummated. (*Commercial Ins. Co.* v. *Hallock*, 2 N. J. L. 645.)

OFFER AND ACCEPTANCE—METHODS OF COMMUNICATION.—An acceptance becomes an enforcible contract from the moment it is put in the same course of communication followed by the offerer. The fact that the offerer fails to receive the acceptance so communicated has no effect. If, however, a different mode of communication is followed by the acceptor, his acceptance does not become a binding contract until it is received by the offerer.

Mail and Telegraph.—An offer sent by mail or telegraph is of no effect until it reaches the offeree. The acceptance of the offer becomes a contract only when it is mailed, i.e., a properly addressed letter of acceptance with sufficient postage put in a United States post box or a prepaid telegram is given to the telegraph company. Failure of the offerer to receive such notification of acceptance does not affect the binding force of the contract.

Where an offer is made by mail, and an acceptance is posted, properly addressed, the contract is complete. A withdrawal of the offer thereafter is ineffective. (*Stein-Gray Drug Co.* v. *H. Michelson Co.*, 116 N. Y. S. 789.)

Withdrawal of Offer by Mail.—An effort to withdraw from or revoke an offer submitted by correspondence is not effectual unless the notice of withdrawal is received by the other party before his acceptance. (*Webster* v. *Casein Co. of America*, 206 N. Y. 506.)

Conditional Acceptance.—A person making an offer is not bound by a conditional acceptance of the offer. (*Cameron* v. *Wright*, 21 App. Div. [N. Y.] 395.)

2. CONSIDERATION.—

Definition.—Consideration may be described generally as some matter accepted or agreed to as a return or equivalent for the promise made, showing that the promise is not made gratuitously. (*Donahue* v. *Rich*, 2 Ind. A. 540.)

What Constitutes Consideration.—A **consideration** consists of some right, interest, profit, or benefit accruing to the party who makes the promise, or some forbearance, detriment, loss, responsibility, act, labor, or service given, secured, suffered or undertaken by the other, to whom it is made. (*Ward* v. *Erie R. R. Co.*, 149 N. Y. S. 717.)

Necessity of Consideration.—A promise to be enforcible, must be based on a consideration, and it must be put in such form as to be available under the rules relating to contracts. (*Adams* v. *Gillig*, 131 App. Div. [N. Y.] 494.)

Good and Valuable Consideration Distinguished.—A **good consideration** is love or natural affection by reason of the relation of the parties by blood, marriage, or family. A **valuable consideration** is a benefit or a detriment as set forth in the definition of consideration.

MUTUAL PROMISES.—Mutual promises concurrently made are considerations for one another. The one promise, and not performance, constitutes the consideration for the other. (*A. B. Dick Co.* v. *Fuller*, 213 Fed. 08; *Morrill* v. *Colehour*, 82 Ill. 618; *Price* v. *Muriat*, 107 Mass. 49; *Bayne* v. *Freiner Est.* 118 Minn. 350.)

LEGAL LIABILITY.—The promise, to constitute a good consideration for a promise, must impose some legal liability on the person making it. A promise to do what the promisor is legally bound to do is not a consideration. The promise must be lawful, definite, and certain.

WAIVER OF A LEGAL RIGHT.—The relinquishment of a legal right is a sufficient consideration. (*In re All Star Feature Corp.*, 232 Fed. 1004; *Hanchett* v. *Ives*, 171 Ill. 122; *Hammer* v. *Sidney*, 124 N. Y. 538.) A promise to refrain from doing something which the promisor has no legal right to do, **is not a consideration for a promise.** (*Sheppey* v. *Stevens*, 177 Fed. 484; *Crosby* v. *Ward*, 6 N. Y. 369; *Everingham* v. *Meighan*, 55 Wis. 354.) The relinquishment of rights may be those under contract generally, the right to sue for damages, claims of a beneficiary in an estate, dower, courtesy, liens, etc. As a general rule a promise to perform an existing legal obligation is not a valid consideration. (*Harris* v. *Cassidy*, 107 Ind. 158; *Parrott* v. *Mexican Cent. R. R. Co.*, 207 Mass. 184; *Carpenter* v. *Taylor*, 164 N. Y. 171.)

FORBEARANCE.—Forbearance by a person having a legal right to do a certain thing from taking action is a sufficient consideration to support a contract. (*Sickles* v. *Harold*, 149, N. Y. 332.) Forbearance to assert either a legal or an equitable claim is sufficient consideration for a contract. If however, the claim is not even doubtful, or plausible and there is no honest belief that it has some foundation in law or in equity the forbearance is not a good consideration.. (*Springstead* v. *Nees*, 125 App. Div. [N. Y.] 230.)

Agreement to Forbear.—An agreement by one to withhold from sale merchandise or securities held by him to secure claims due him is a sufficient consideration for a contract. (*Bean* v. *Trust Co. of Amercia*, 136 App. Div. [N. Y.] 69.)

PAST CONSIDERATION.—A past consideration will not support a promise except where the past consideration was based on a previous request. (*Moore* v. *Elmer*, 180 Mass. 15; *Aultman* v. *Kennedy*, 33 Minn. 339; *Arend* v. *Smith*, 151 N. Y. 502.)

A promise to pay for past services rendered without request, is void for want of consideration. (*Myers* v. *Dean*, 32 N. Y. S. 237.)

A LEGAL OBLIGATION NOT A CONSIDERATION.—A promise to do what one is already under a legal obligation to do is not a sufficient consideration for another contract. (*Carpenter* v. *Taylor*, 164 N. Y. 171.)

WHEN NATURAL AFFECTION IS NOT A CONSIDERATION.—Natural love and affection is an insufficient consideration to support an **executory** contract. (*Hadley* v. *Reed*, 106 App. Div. [N. Y.] 334.)

THIRD PARTY BENEFICIARY.—A consideration is necessary to support a contract for the benefit of third parties. A promise to pay the debt of another, without some new benefit to the obligor or injury to the obligee as a promise to forbear, or the like, is without consideration and is void. (*Bogardus* v. *Young*, 19 N. Y. S. 885.)

An extension of time for payment of a claim by a creditor of a corporation at the request of a stockholder is sufficient consideration for a promise by such a stockholder to pay the debt. (*Honsinger* v. *Mulford*, 35 N. Y. S. 986.)

3. PARTIES.—All persons are competent to enter upon enforcible contracts except those partially or totally disqualified under the law.

TOTAL DISQUALIFICATION.—One legally declared incompetent by a court having juridiction and having a guardian appointed to administer his affairs, has no power to make an enforcible contract in the state in which he was judicially declared incompetent. Such persons include insane persons and spendthrifts.

PARTIALLY DISQUALIFIED—MINORS.—At common law and in most states by statute, an infant is a person under 21 years of age. Contracts of an infant may be valid or voidable at his option.

Valid contracts are for necessities furnished in accordance with station in life. One is liable for such at their reasonable value, not at the agreed price. Strictly speaking, the liability is on *quantum meruit*, i.e., quasi-contract, and not on contract. The items must fall under the classification of necessities required for physical, mental, or spiritual welfare, such as food, clothing, medical attendance, shelter and ordinary education, but does not include articles of pleasure, ornament, or luxury.

Voidable contracts.—Contracts of an infant, exclusive of those for necessities, are voidable at his option during his infancy, and on becoming of age he may avoid or ratify them.

Disaffirmance of Contract.—This may be done by an infant at any time but must be completed within a reasonable time after he becomes of age, except that deeds to land cannot be disaffirmed until he reaches his majority.

Return of Value Received.—The courts of the various states are in conflict on this subject. Some courts hold that an infant, although he has received the benefits under an executed contract, may recover from the other party

what he has paid even though he cannot return what he has received. (*MacGreal* v. *Taylor*, 167 U. S. 688; *Reynolds* v. *McCurry*, 100 Ill. 356, *Gillis* v. *Goodwin*, 180 Mass. 140.) This rule is followed in New York. Other jurisdictions hold that an infant who has received a benefit under an executed contract cannot recover the consideration on repudiation by him without returning what he received. (*Johnson* v. *Ins. Co.*, 56 Minn. 365.)

Personal Defense.—Infancy is a personal defense available to the infant only and cannot be pleaded by the other party to the contract.

Torts.—Infants are liable for their torts, i.e., wrongs such as frauds, trespass, etc.

Minor's Representation of Full Age.—A minor who, fraudulently representing himself or leading others to think him of full age, enters upon a contract, will be held liable in a court of equity on his contract. The other party on discovery of the fraud may rescind and recover from the infant what he has parted with. The liability of the infant is for his fraud (*Studwell* v. *Shapter*, 54 N. Y. 249; *Burnett* v. *Williams*, 30 Fed. Rep. 697) and not on contract (*Badger* v. *Phinney*, 15 Mass. 359).

INSANE PERSONS.—

Legally Declared.—Contracts of a person judicially declared insane and placed under a guardian are absolutely void.

Not Legally Declared.—The general rule is that the law presumes every person sane until the contrary is established; hence a contract of a person of unsound mind is voidable only on establishing his insanity. The burden of proof is upon the person alleging insanity.

Degree of Insanity.—An insane person's contract is voidable where his infirmity is such as to render him incapable of understanding the nature of the contract and its probable consequence. (*Perry* v. *Pearson*, 135 Ill. 218; *Brown* v. *Brown*, 108 Mass. 386.) It need not be entire want of reason or permanent insanity; yet it must be something more than mere weakness of intellect. (*Guild* v. *Hull*, 127 Ill. 523.)

Executed Contracts.—The rule followed by most states is that an executed contract of an insane person is not voidable. These courts follow the leading English case of *Moton* v. *Camroux*, 2 Exch. 489, which states: "The modern cases show that when that state of mind was unknown to the other party, and no advantage was taken of the lunatic the defense cannot prevail, especially where the contract is not merely executory, but executed in whole or in part, and the parties cannot be restored to their original positions." Followed in: *Mutual Life Ins. Co.* v. *Hunt*, 79 N. Y. 541; *Burnham* v. *Kidwell*, 113 Ill. 425. Contra principle followed in: *Seaver* v. *Phelps*, 11 Pick. 304; *Rogers* v. *Blackwell*, 49 Mich. 192.

ALIENS.—In practically all the states aliens have the same rights as subjects to make and enforce contracts regarding personal property. In a few states restrictions are imposed in regard to real estate.

Alien Enemies.—An alien enemy cannot make a new contract or enforce existing contracts during the continuance of hostilities. Existing contracts are as a rule suspended during hostilities. (*U. S.* v. *Grossmayer*, 9 Wall. 72.)

MARRIED WOMEN.—In most states married women have full rights to enter into enforcible contracts.

CORPORATIONS.—Corporations have full authority to enter into contracts within their express or implied corporate powers.

Ultra Vires Contracts.—An executory contract beyond its corporate powers is said to be *ultra vires* and is void. A corporation, however, is liable on its *ultra vires* contracts where it has accepted benefits under the contract.

OLD AGE AND PHYSICIAL INFIRMITY.—The mere fact that a man is old and feeble, and of less active mind than formerly, does not render him incompetent to manage his own affairs and does not incapacitate him from making a valid contract. (*Jennings* v. *Hennessy*, 40 App. Div. [N. Y.] 633.)

4. **SUBJECT MATTER.**—The subject matter or object of a contract is that which the agreement is about and may be anything concerning the affairs of mankind not forbidden by law or in derogation to human welfare.

Must be lawful.—Unlawful agreements are those in violation of positive law and those which, although not contravening the law, are against the welfare of mankind and are not enforcible on the ground of public policy.

In Violation of the Positive Law.—If the object of an agreement is illegal, a contract does not result. (*U. S. Bank* v. *Owens*, 2 Pet. 527; *Harvey* v. *Merrill*, 150 Mass. 1; *Debbit* v. *Lander*, 72 Wis. 120.) Agreements to violate the law are illegal. (*U. S.* v. *Trans Missouri Freight Assn.*, 166 U. S. 290; *Coat* v. *Phillip*, 56 N. Y. 31.)

Fraud Against Third Persons.—An agreement to commit a fraud against a third person (*Douglas State Bank* v. *Lewinson*, 192 Ill. A. 364; *Sprague* v. *Webb*, 168 App. Div. 292), or the public in general (*Clinch* v. *Proctor*, 66 Fed. 240; *Nickerson* v. *English*, 142 Mass. 267; *Matesne* v. *Horwitz*, 101 N. Y. 469), or the commission of a civil wrong (*Randal* v. *Howard*, 2 Black, 585; *Adams* v. *Outhouse*, 45 N. Y. 318; *Rice* v. *Wood*, 113 Mass. 133) against a third person, is illegal and void even though the wrong itself may not be a crime or an indictable offense.

AGREEMENTS AGAINST PUBLIC POLICY.—Agreements opposed to public policy are illegal and void. (*Teal* v. *Walker*, 111 U. S. 242; *Palmbaum* v. *Magulsky*, 217 Mass. 306; *Richardson* v. *Crandall*, 48 N. Y. 348; *Roch* v. *Ekern*, 162 Wis. 291.) In order to declare a contract invalid because it contravenes public policy, it should appear that the agreement contemplated an illegal or immoral act, and it is not sufficient that the condemnable acts were done thereunder if they were not contemplated by the agreement. (*Drake* v. *Lauer*, 182 N. Y. 533.)

Public Policy Defined.—"The term 'public policy' as applied to contracts embraces all acts or contracts which tend clearly to injure the public health, the public morals, or confidence in the purity of the administration of the law, or to undermine that sense of security for individual rights, whether of personal liberty or private property which every citizen has a right to feel." (13 C. J. Contracts 425; *Holland* v. *Sheehan*, 108 Minn. 362.)

Test of Public Policy.—The test of public policy is the evil tendency of a contract rather than the actual injury. Just what public policy is in a given jurisdiction is for the courts to decide, as it varies with time and place. The public policy of the state is to be ascertained from the established law as found in the constitution, statutes or judicial records, being the principle of law that no one can lawfully do that which tends to injure the public or to be against the public good.

If the act contracted for is against public policy the contract is unenforcible regardless of whether the act itself is criminal or not. (*Cahill* v. *Gillman*, 146 N. Y. S. 224.)

General Classification of Agreements Against Public Policy.—

Against good morals such as,

1. Agreements of an immoral nature.
2. Gambling and wagering transactions.
3. Agreements to commit a fraud, breach of trust or confidence.

Against marital relations

1. Absolute restraint of marriage.
2. In derogation of the marital relation.

Against public service

1. Interfering with legislative actions.
2. Influencing by corrupt means operations of a political subdivision of the nation.
3. Traffic in public office.
4. Influencing courts of justice by corrupt means.

Agreements in Restraint of Trade.—Agreements in unreasonable restraint of trade are illegal (*Addyston Pipe etc. Co.*, 85 Fed. 271), but agreements in reasonable restraint of trade are valid (*Carter* v. *Alling*, 43 Fed. 208). Modern authorities gauge the validity of contracts on the reasonableness of the restraint imposed as necessary to protect the parties in whose favor it was imposed. Leading cases are: *Gibbs* v. *Consolidated Gas Co.*, 130 U. S. 369; *Diamond Match Co.* v. *Roever*, 106, N. Y. 473.

Total Restraint of Trade.—A contract not to engage in a business absolutely unlimited as to time and place is void as against public policy. (*Von Bremen* v. *McMonnies*, 138 App. Div. [N. Y.] 319.)

Partial Restraint of Trade.—A valid contract in partial restraint of trade may be made where the operation of the agreement is partial and limited under reasonable conditions and where there is a good consideration. (*A. Booth & Co.* v. *Seibold*, 74 N. Y. S. 776.)

Agreements Tending to Violate Confidence.—Any contract, the object or tendency of which is to place a person owing duties to third persons in a position where he is under obligations to two parties having antagonistic interests, is void even though in fact the contract has no bad effect. (*Bolton* v. *Amsler*, 95 N. Y. S. 481.)

Contracts for Political "Influence."—An agreement for services to secure contracts by favoritism from state officers by reason of social and political relations with such officers is void as against public policy. (*Drake* v. *Lauer*, 182 N. Y. 533.)

Lobbying Contracts.—A contract to do lobbying is illegal. But it is not illegal to draft legislative bills, explain them to the members of the legislature and request their introduction. (*Chesebrough* v. *Conover*, 140 N. Y. 382.)

Contracts against Public Policy Not Enforcible.—Where a contract is void because of public policy, the courts will not enforce it, even if the parties did not raise the question of public policy as an objection against the contract. (*Baird* v. *Sheehan*, 166 N. Y. 631.)

CLASSIFICATION OF CONTRACTS.—There are various classifications of contracts, such as:

1. Express and implied contracts
2. Executed and executory contracts
3. Contracts of record

4. Specialties or contracts under seal
5. Void, voidable, and valid contracts

Express Contracts.—"A contract is express when the agreement is formal, and stated either verbally or in writing." (*Gillan* v. *O'Leary*, 124 App. Div. [N. Y.] 498.)

Contracts Implied in Fact.—"A contract may be implied where an agreement in fact is presumed from the acts of the parties and this is the proper meaning of an implied contract." (*People* v. *Dummer*, 274 Ill. 637; also *People* v. *Spier*, 77 N. Y. 144; *Baker* v. *Stoutmeyer*, 2 McG. [La.] 61.)

Contracts Implied in Law.—Generally called **constructive** or **quasi-contracts.** "Constructive contracts, which are fictions of law adopted to enforce legal duties by actions of contract, where no proper contract exists, express or implied." (*Hertzog* v. *Hertzog*, 29 Pa. 465.) "The term 'implied contract' has also been applied to a class of obligations which are created by law without the assent of the party upon whom the obligation is imposed, on the ground that they are dictated by reason and justice. They are not contract obligations in the true sense because there is no agreement of the parties, but they are constructive contracts created by law." (*People* v. *Dummer*, 274 Ill. 737; also *Navada Co.* v. *Farnsworth*, 89 Fed. 164; *Gutta Percha etc. Mfg. Co.* v. *Houston*, 108 N. Y. 276.)

Executed Contracts.—"One in which the object of the contract is performed. (*Fletcher* v. *Peck*, 6 Cranch [U. S.] 87.)

Executory Contracts.—"A contract to do some future act." (*Hale* v. *Sharpe*, 6 Caldw. [Tenn.] 275.) "Whilst any act remains to be done the contract is understood to be executory." (*Farrington* v. *Tennessee*, 95 U. S. 679; also *Fox* v. *Kitton*, 19 Ill. 519; *Justice* v. *Lang*, 42 N. Y. 493.)

Contracts of Record.—These are judgments and recognizances. "A judgment is a contract of the highest nature known to the law." (*Taylor* v. *Root*, 4 Keyes [N. Y.] 344.) A recognizance is an obligation entered into before a court of record, undertaking to do or not to do a certain thing. Generally referred to as a bond to keep the peace, appear as a witness, pay a debt, etc.

Specialties or Contracts under Seal.—Contracts under seal derive their legal effect from the formality of the instrument, the essential elements of which are the seal and delivery. (Leake Digest, pp. 134–146.) Under the common law consideration was not necessary in sealed contracts, but most of the states have adopted statutes to the effect that a seal is only presumptive evidence of a consideration (*Home Ins. Co.* v. *Watson*, 59 N. Y. 390) which may be rebutted. "In contracts made by deed under seal, a consideration is not essential to give validity to the promise, as it is in the case of simple contracts." (Leake Digest, pp. 134–146.)

Parol or Simple Contracts.—These include all contracts in writing not under seal nor of record, and also all oral contracts.

Void Contracts.—An agreement in which one of the four necessary elements of a contract is absent, has no legal effect, and is not binding on either party. In reality it is no contract at all. The expression "void contract," although used, is a misuse of terms.

Voidable Contracts.—A contract which is binding on one of the parties but is capable of being rejected or accepted at the will of the other.

Valid Contracts.—One binding on the parties and of full legal effect.

FORM OF CONTRACT.—

Oral.—Parol or simple contracts, except where required by statute to be written, may be made by word of mouth and are enforcible as such except for the difficulty of proving the contract.

Written.—In practically all of the states certain parol contracts must be in writing and sometimes follow prescribed forms. The foundation of most of the state laws in this respect is the Statute of Frauds mentioned hereinafter. Aside from the contracts under that statute there are a number of others not so general which must be in writing, such as insurance contracts which under the common law could be oral and are now generally required to be in writing and in some states in statutory form; contracts for the recovery of debt barred by the statute of limitations; promise of an infant on becoming of age to pay for debts contracted during minority; assignments of patents and copyrights.

See "Statute of Frauds," page 420.

EFFECT OF CONTRACT—REALITY OF CONSENT.—As stated, one of the requisites of a valid contract is agreement. This is not obtained without real consent of both parties, which cannot be said to exist where there is mistake, fraud, duress, undue influence, or misrepresentation. (For further comment see page 403.)

MISTAKE.—Is occasioned by a misconception of some matter and may be a mistake of fact or a mistake of law.

Mistake of Fact Defined.—Mistake of fact is a mistake not caused by the neglect of a legal duty on the part of the person making the mistake and consisting in:

1. An unconscious ignorance or forgetfulness of a fact, past or present, material to the contract, or
2. Belief in the present existence of a thing material to the contract, which does not exist, or in the past existence of such a thing, which has not existed. (South Dakota Civil Code No. 1206.)

Mistake Affecting Validity.—"Mistake does not of itself affect the validity of contracts at all. But the mistake may be such as to prevent any real agreement being formed in which case the contract is absolutely void both at law and in equity." (*Kyle* v. *Kavanaugh*, 103 Mass. 356.)

Mistake as to Parties—Subject Matter.—A mutual mistake as to the subject matter, that is, what the contract is about or what is to be done under the contract, or the identity of the persons with whom the contract was made, avoids the contract as there is no meeting of the minds.

As to Legal Effect and Value of Subject Matter.—A mistake regarding the legal effect or the value of the subject matter does not affect the validity of a contract.

Mistake of One of the Parties.—A mistake of one of the parties only and not known to the other, does not affect a valid contract. (*Elliott Mach. Co.* v. *U. S.*, 44 Ct. Cl. 127; *Monks* v. *West Street Imp. Co.*, 149 App. Div. [N. Y.] 504; *Bostwick* v. *Mutual Ins. Co.*, 116 Wis. 392.)

Mistake—Mutual Mistake.—One of material facts will avoid the agreement. (*Allen* v. *Hammond*, 11 Pet. 63; *Flynn* v. *Smith*, 111 App. Div. [N. Y.] 870; *Hoops* v. *Fitzgerald*. 204 Ill. 325.) "Mutual mistake consists of a clear showing of a misunderstanding, reciprocal and common to both parties, in respect to the terms and subject matter of the contract, or some substantial

part thereof." (13 C. J. Contracts 375; *C. H. Young Co.* v. *Springer*, 113 Minn. 382.)

Mistake of Law.—This does not avoid the contract. The rule is well established that a mistake of law or the legal effect of a contract will not affect the enforcibility of the agreement. (*Lamborn* v. *Dickinson County*, 97 U. S. 181; *Soley* v. *Jones*, 208 Mass. 561.) Mistake as to the law of other states is regarded as mistake of fact and may under certain circumstances avoid the contract.

Mistake of Fact—Remedies.—Remedies are both equitable and legal where contracts are entered under mistake of fact. **In equity,** where specific performance is prayed for, the defense of mistake may be interposed or a bill may be filed to have the contract declared void. In case of mistake of form or expression, the instrument may be reformed in accordance with the real intent of the parties.

At Law.—The contract may be repudiated and all values paid thereunder recovered.

Mistake—When Basis for Relief.—The rule that mistakes to be the ground for relief must be mutual applies only where one party to a contract seeks relief against the other. (*Lumber Exchange Bank* v. *Miller*, 40 N. Y. S. 1073.)

To rescind a contract on the ground of mistake the mistake must be honest and excusable, and a party may not obtain relief on the ground that he erred in construing a plain and unambiguous contract, the terms of which he knew before entering into it. (*Hayward* v. *Wemple*, 152 App. Div. [N. Y.] 195.)

A contract will be rescinded for mutual mistake as to material facts, where the party relied absolutely on the statement of the other who knew or should have known that the other party was acting in reliance of such facts as the truth. (*L. D. Garrett Co.* v. *Halsey*, 77 N. Y. S. 989.)

WRITTEN CONTRACTS—CONTENTS UNREAD AND UNKNOWN.—The general rule is that a person cannot avoid his written contract on the ground that he did not know its contents, did not read it, or that he supposed it was different in its terms or mere form. (*Black* v. *Wabash etc. R. Co.*, 111 Ill. 351; *Wood* v. *Mass. Mutual Acc. Assn.*, 174 Mass. 217; *Peo* v. *Dunbar Contracting Co.*, 215 N. Y. 416.) "It will not do for a man to enter into a contract; and, when called upon to respond to its obligations, to say that he did not read it when he signed it, or did not know what it contained. If this were permitted, contracts would not be worth the paper on which they were written. But such is not the law. A contractor must stand by the words of his contract, and, if he will not read what he signs, he alone is responsible for his omission." (*Upton* v. *Tribilcock*, 91 U. S. 45.)

EXPRESSED INTENTIONS ARE BINDING.—A person is bound on his contracts in accordance with the reasonable meaning of his expressed intention regardless of what his secret intentions were. "The rule of law is stated in *Freeman* v. *Cooke*, 2 Exchange 654. . . . . If, whatever a man's real intention may be, he so conducts himself that a reasonable man would believe that he was assenting to the terms proposed by the other party, and the other party upon that belief enters into the contract with him, the man thus conducting himself would be equally bound as if he had intended to agree to the other party's terms." (*Smith* v. *Hughes*, L. R. 2 Q. B. 597; also *Dybarg* v. *Minneapolis Sanitarium*, 128 Minn. 292.)

FRAUD.—Fraud is a false statement of a material fact made with knowledge of its falsehood or reckless disregard as to whether it is true or false,

with the intention that it shall be acted upon by another and which is relied and acted upon by the other party to his injury.

Remedies of Defrauded Party.—The party so deceived in entering upon a contract, upon discovery of the deception can avoid the contract or maintain an action for the damages he sustained. (*Cooper* v. *Schlesinger*, 111 U. S. 148; *Krankowski* v. *Knapp*, 268 Ill. 183; *Adams* v. *Gillig*, 199 N. Y. 314; *Lee* v. *Burnham*, 82 Wis. 209.)

Must Be a Statement or Representation.—Mere non-disclosure does not constitute fraud unless there is a duty to disclose all facts to the other party or unless active steps are taken to conceal the truth.

Opinion.—Mere expression of opinion, although erroneous, is not fraud. (*John* v. *Stephenson*, 154 U. S. 625; *Bryant* v. *Ocean Ins. Co.*, 22 Pick. 200; *Swanson* v. *Fisher*, 148 Ill. A. 104.)

Expectation of Future Act.—An expectation, representation, or promise as to some future act or performance which may have brought about the agreement, will not constitute fraud where the expectation is not realized. (*Southern Dev. Co.* v. *Silver*, 125 U. S. 247; *Miller* v. *Sutliff*, 241 Ill. 521; *Dave* v. *Morris*, 149 Mass. 188; *Adams* v. *Gillig*, 199 N. Y. 314.)

Representation of Law.—An erroneous representation of law is not fraud. (*Brink* v. *Johnson*, 146 Fed. 209; *Hooker* v. *Midland Steel Co.*, 215 Ill. 444; *Gormely* v. *South Side Gym. Assn.*, 55 Wis. 350.)

Trade Talk.—Commendable expressions as to value, appearance, quality, prospects, etc., are not sufficient to constitute fraud.

Effect of Fraud.—An agreement procured by fraud is voidable, but not void. The defrauded party has the right to elect whether he will treat the contract as binding or refuse to be bound by it. (*Foreman* v. *Bigelow*, 9 F. Case No. 4934, 4 Cliff 508; *Wallace* v. *Pierce*, 97 Mass. 46; *Elmer* v. *Loper*, 66 N. J. L. 50; *Adams* v. *Gillig*, 199 N. Y. 314.)

Remedies of Party Defrauded.—He may either:

1. Affirm the contract, keeping what he has under it and sue for the damages he sustained by reason of the fraud. The affirmance of the contract is not a waiver of the fraud and does not bar the right to recover damages (*Hecksher* v. *Edenborn*, 203 N. Y. 210; *Gibson* v. *Nelson*, 111 Minn. 183; *Bumbs* v. *Burns*, 137 Fed. 781); or,

2. Rescind the contract and sue to recover what he has parted with. To rescind the contract he must return the consideration he received. If he retains the benefits under the contract his right to rescind is gone.

Fraud Affirmed.—A person cannot rescind a contract either at law or in equity on the ground of fraud when after knowledge of the fraud he affirms it. (*Mc Naught* v. *Equitable Life Assn. Society of U. S.*, 136 App. Div. 774.)

Delay in Rescinding Fraudulent Contract.—An innocent party induced to make a contract by fraud cannot after discovering the fraud delay in rescinding until he receives the benefits.

Prompt Recession Necessary in Fraudulent Contract.—The right to rescind a contract because of fraud or fraudulent representation must be asserted promptly. (*Railway Advertising Co.* v. *Standard Rock Candy Co.*, 53 N. Y. S. 790.)

Evidence of Fraud.—The burden of proof is on the party alleging fraud (*Eppley* v. *Kennedy*, 131 App. Div. [N. Y.] 1.)

Action on Fraud.—In an action on contract fraud is an affirmative defense and must be proved. (*Prahar* v. *Tousey*, 93 App. Div. 507.)

DURESS.—Duress is a threatened or actual violence or imprisonment reasonably sufficient to cause such apprehension that a person will enter into a contract against his own free will. "Duress exists where one is induced, by another's unlawful act, to make a contract or perform some act under circumstances which prevent his exercising his free will." (*Hackley* v. *Headley*, 45 Mich. 569.) "Duress is a species of fraud in which compulsion in some form takes the place of deception in accomplishing the injury." (*Kans* v. *Gracey*, 162 Iowa 671.)

Effect of Duress.—A contract entered into by a person under duress is voidable at his option, but not void. As in fraud, the contract may be disaffirmed or ratified.

Remedies.—"One who by duress is compelled to sign a contract whereby he parts with his property may proceed in equity for a recession, may rescind by his own act and sue at law, or may allow the contract to stand and sue for damages." (*Neibuhr* v. *Gaye*, 99 Minn. 149.) "Unlawful duress is a good defense to a contract if it includes such degree of constraint or danger, either actually inflicted or threatened and impending, as is sufficient in severity or apprehension to overcome the mind and will of a person of ordinary firmness." (*U. S.* v. *Huckabee*, 16 Wall. [U. S.] 414.)

Prompt Action Necessary to Rescind for Duress.—One entitled to disaffirm a contract for duress must act promptly. A contract or deed given under duress may be ratified by acquiescing therein for a reasonable time. (*Myers* v. *Grey*, 146 App. Div. [N. Y.] 923.)

Duress Must Be Pleaded.—The allegation of duress is an affirmative defense, which must be pleaded. (*Sternback* v. *Friedman*, 34 App. Div. [N. Y.] 534.)

UNDUE INFLUENCE.—"Undue influence is a kind of mental coercion, which destroys the free agency of one and constrains him to do that which is against his will and what he would not have done if left to his own judgment and volition, so that his act becomes the act of the one exerting the influence, rather than his own act, such act being one to his own injury, or to the injury of some one upon whom he would if left to his own free will, have bestowed a benefit." (*Beard* v. *Beard*, 173 Ky. 131.)

What It Consists of.—"Undue influence . . . consists in acts which though not fraudulent, amount to an abuse of the power which circumstances have given to the will of one individual over that of another." (Holland Jr., page 264.) Undue influence is a form of fraud and consists of taking unfair advantage of another's weakness of mind, necessities, and distress, or by reason of the confidential relations or family relations existing between the parties.

Effect of Undue Influence.—A contract entered into under undue influence is voidable at the option of the injured party. To affect a contract on the ground of undue influence it must be shown to be such an influence as the law condemns. (*Bowdoin College* v. *Merritt*, 75 Fed. 480; *Roberts* v. *Little*, 9 Misc. 497; *Batavia Bank* v. *North*, 114 Wis. 637.)

ILLEGAL CONTRACTS.—

Effect of Illegality—General Rule.—The law leaves the parties where it finds them and will afford no relief. (*Sage* v. *Hampe*, 235 U. S. 99; *Pelosi* v. *Bugbee*, 217 Mass. 579; *Hart* v. *City Theatres Co.*, 215 N. Y. 322.)

Exception to General Rule—Parties Equally Guilty.—Where parties to an illegal contract are in *pari delicto*—equally guilty—but public policy requires the intervention of the courts, relief may be obtained. (*Western Union Tel. Co.* v. *Burlington etc. R. Co.*, 11 Fed. 1.) But: "Courts are and should be cautious in affording relief to a fraudulent debtor or other violator of the law under this exception, and should act only where it is evident that some greater public good can be subserved by action than by inaction." (*O'Connor* v. *Ward*, 60 Miss. 1025.)

Exception—One Party Guilty.—Where parties are not equally guilty and where it is in the interest of public policy to allow one of the parties to obtain relief from the transaction, the courts have granted relief. (*Logan County Nat. Bank* v. *Townsend*, 139 U. S. 67; *Duval* v. *Wellman*, 124 N. Y. 156.)

Exception—Object not Consummated.—Where the illegal purpose is not consummated, the agreement may be repudiated and the consideration paid thereunder recovered. (*Nat. Bank* v. *Carr*, 189 U. S. 426; *Fisher* v. *Hildreth*, 117 Mass. 558; *Donville* v. *Merrick*, 25 Wis. 688.)

Illegality Must Be Pleaded as a Defense.—Illegality must be pleaded as a defense where the illegality is not shown either by the complaint or by the evidence. (*Rabinowitz* v. *Cunard S. S. Co.*, 119 N. Y. S. 625.)

INTERPRETATION OF CONTRACTS.—The courts in interpreting contracts apply broad principles to arrive at the intent of the parties. "The rules of interpretation ought not to be subtle; they are designed for people of common understanding; not as an act of logic but as the plain reason of a father of a family." (*Gathright* v. *Callaway County*, 10 Mo. 663.)

Intention of the Parties.—"The purpose of all interpretation is to ascertain and give effect to the intention of the parties to the contract as expressed by their writing." (*Alf. Bennett Lumber Co.* v. *Walnut Lake Cypress Co.*, 105 Ark. 421; also *Chesapeake etc. Canal Co.* v. *Hill*, 15 Wall. 94; *Smith* v. *Kerr*, 108 N. Y. 31; *Kluster* v. *Joseph Schlitz Brewing Co.*, 143 Wis. 347.)

The cardinal principle to be followed in the interpretation of contracts is that the intention of the parties shall be carried out. (*Anderson* v. *New York and H. R. R. Co.*, 132 App. Div. [N. Y.] 183.)

Ambiguous Contracts.—Where a contract is ambiguous the practical construction placed thereon by the parties may be considered in determining their intent. (*Jarvie* v. *Arbuckle*, 173 App. Div. [N. Y.] 199.)

Construction as a Whole.—The intention of the parties must be gathered from the entire contract, not a portion of it. (*Koles* v. *Borough Park Co.*, 142 App. Div. [N. Y.] 765.)

Separate Writings.—Where separate letters or instruments relate to one transaction or separate papers referred to, they will be read with reference to one another to interpret the contract. (*Pittsburgh etc. R. Co.* v. *Keokuk etc. Bridge Co.*, 155 U. S. 156; *Illinois Match Co.* v. *Chicago etc. R. Co.*, 250 Ill. 396; *Poel* v. *Brunswick-Balke-Collender Co.*, 216 N. Y. 310; *Hunt* v. *Frost*, 4 Cush. 54.)

Meaning of Words.—"The language employed is given its natural and commonly understood meaning." (*U. S. Fidelity etc. Co.* v. *French Mut. Gen. Soc.*, 212 Fed. 620.)

Technical Words.—Technical words will be interpreted in the sense in which they are generally used in the business to which the contract relates. (*Potter* v. *Phoenix Ins. Co.*, 63 Fed. 382.)

Writing and Printing.—Where both are used in a contract and are in conflict, the writing will prevail. (*United Surety Co.* v. *Summers*, 110 Md. 95.)

Words and Figures.—If in conflict, words govern. (*United Surety Co.* v. *Summers*, 110 Md. 95.)

Implied Terms.—In addition to words used, a contract also includes what is necessarily to be implied from the language used. (*Du Pont de Nemours Powder Co.* v. *Schlotterman*, 218 Fed. 353; *Senior* v. *Etger*, 213 N. Y. 589.)

Laws of the State.—The law of the state where the contract was made becomes part of it. (*Southern Surety Co.* v. *Oklahoma*, 241 U. S. 582; *People* v. *Metropolitan Surety Co.*, 211 N. Y. 107.)

Place.—"A contract as a rule is considered as entered into at the place where the offer was accepted (*Compagnie Générale etc.* v. *Simon Hertzig etc. Cie.*, 89 Misc. [N. Y.] 573; *In re Kahn*, 55 Minn. 509) or where the last act necessary to complete it is performed (*Clark* v. *Bell*, 223 Fed. 573).

Time.—If limited, the time runs from the date of the contract.

Addition of Words.—Words will not be added to a contract to aid a doubtful construction where the contract is open to a more natural meaning without such addition. (*Klauder* v. *C. V. G. Import Co.*, 113 N. Y. S. 716.)

Conflicting Clauses.—Where two clauses of a contract are repugnant and cannot stand together, the first will stand and the second will be rejected. (*Pittsburgh 2 S. R. Co.* v. *Central Trust Co. of N. Y.*, 156 App. Div. [N. Y.] 182.) Written or typewritten provisions would control over uncertain or repugnant printed provisions. (*Heyn* v. *N. Y. Life Ins. Co.*, 192 N. Y. 1.)

Surrounding Circumstances Considered.—"The circumstances surrounding the parties when the contract was made form a sort of context that may be resorted to in doubtful cases to aid in arriving at the meaning of the contract." (*Singer* v. *Brenner*, 19 Pa. Dist.)

Circumstances at Time Contract Was Made.—A contract must be construed in the light of the circumstances surrounding it at the time of its making and not in the light of subsequent events. (*Davin* v. *City of Syracuse*, 145 App. Div. [N. Y.] 904.)

Existing Laws Become a Part of a Contract.—Laws existing at the time and place of making a contract become a part of it as if incorporated with it (*Trustees etc. of Town of Brookhaven* v. *Smith*, 98 App. Div. [N. Y.] 212.)

Time Essence of Contract.—Where the parties make time of the essence of a contract, they must perform it within the time limit. (*Moot* v. *Business Men's Investment Assn.*, 90 Hun. N. Y. 155.)

Time is the essence of a building contract requiring completion of the building on or before a specified date where a delay means a loss of rents. (*Mikalajewski* v. *Pugell*, 114 N. Y. S. 1084.)

Time Not Expressed.—Where time for performance of a contract otherwise complete is not specified, the presumed intention is that performance shall be within a reasonable time under the circumstances which will be construed as if originally expressed in the contract. (*Northrup* v. *Scott*, 148 N. Y. S. 846.)

Matters of Fact Decided by Jury.—It is for a jury to decide what an oral contract is, where the evidence is conflicting as to the intent of the parties and as to its terms. (*Patten* v. *Pancoast*, 109 N. Y. 625.)

Matters of Law Decided by Court.—A contract being complete and not ambiguous, its interpretation is a matter of law for the court. (*McNally* v. *Georgia-Florida Lumber Co.*, 210 N. Y. 588.)

LIQUIDATED DAMAGES OR PENALTY.—Where a contract provides for the payment of a sum of money as liquidated damages in the event of a breach, whereas in fact the sum agreed upon is in the nature of a penalty, the courts will not enforce the contract. On the other hand, if the parties call it a penalty where it is in fact liquidated damages, the courts will interpret it as liquidated damages. (*War* v. *Building Co.*, 125 N. Y. 230.)

WHAT LAW GOVERNS.—In general, the law of the place where the contract was made governs as to execution, authentication, and construction. As to performance, satisfaction, or discharge, the law of the place where the object of the contract is carried out governs. "As to mere personal contracts the law thereof as to their validity and interpretation, is that of the place where they were made; the *lex loci contractus*, unless the parties thereto intended that they should be governed by the law of the place of performance: the *lex loci solutionis*, or of some other place. That is, the place of the contract is, generally speaking, a matter of mutual intention, but the intended place, as determined by legal presumption in some cases and evidentiary circumstances in others, settles all questions as to the legal test of validity and interpretation. Such presumption, in the absence of evidence to the contrary, is that the place of making and performance, in a physical sense, is the place in a legal sense, but the place of performance when different from that of the actual making, is the place in such legal sense, subject to the presumption being rebutted by clear evidence of intention, this being again subject to some exceptions in case of intention to commit fraud on the law." (*International Harvester Co.* v. *McAdam*, 142, Wis. 114.)

DISCHARGE OF CONTRACTS.—Contracts may be discharged by

1. Performance
2. Agreement
3. Breach
4. Operation of law
5. Impossibility of performance

1. DISCHARGE BY PERFORMANCE.—In order that performance may discharge a contract, each party must have completed his part. In an executory contract performance by one discharges his obligations but not the contract. Where a promise is given for an executed consideration the performance of the promise discharges the contract.

Sufficiency of Performance.—Under the common law, performance must be strictly in accordance with the terms of the contract. The modern rule interprets sufficiency of performance to the effect that where one party has substantially completed his part he may recover his contract price less the amount the other party would have to pay for the completion of any minor, unintentional, and immaterial omission or deviation. This rule holds true, particularly in construction and building contracts. (*Heckmann* v. *Pinkney*, 81 N. Y. 211.)

Substantial Performance.—Substantial performance of a contract is performance, except as to unsubstantial omissions with compensation therefor, and when the omissions are slight and unintentional, compensation is substituted *pro tanto* for performance to prevent the hardship of a failure to recover for that which was well done. (*Dickinson* v. *Sheldon*, 146, App. Div. 144.)

Renunciation.—Where one party of an executory contract renounces it, the other party may sue for a breach, although the time for performance has not arrived. (*Berstein* v. *Meech*, 130 N. Y. 354.)

Minor Unintentional Omissions and Deviations.—The courts construe minor, unintentional omissions and deviations as those that are "slight or susceptible of remedy, so that an allowance out of the contract price will give the other party substantially what he contracted for." (*Elliott* v. *Caldwell*, 43 Minn. 357.)

Time for Performance.—Where time is of the essence of a contract and so stated therein, it is strictly construed and the contract to be discharged by performance must be finished within the time limit. If completed after that time it is not performance and is not binding on the other party unless he waives the breach.

Satisfaction of One of the Parties.—Contracts which must be performed to the satisfaction of one of the parties can be discharged by performance only when the party is satisfied. Interpretation of such contracts depends on the subject matter. If it relates to personal tastes or judgment of one of the parties, he is the sole judge. The only requirement is that he be honest about his dissatisfaction.

Payment in Substantial Performance.—No action will be on a contract to furnish materials and work of a specific character to be paid for on performance unless it is done substantially in the manner stipulated. (*Lewis* v. *Yagel*, 28 N. Y. S. 833.)

Payment Conditional on Architects Certificate.—Where a building contract makes an architect's certificate a condition of payment, payment is not due without such certificate unless it is unreasonably withheld. (*Beecher* v. *Schuback*, 23 N. Y. S. 604.)

Payment when Due.—In the absence of evidence as to the terms of a contract, the price expressed therein is presumed to be payable only on the completion of the work. (*Smith* v. *Sheltering Arms* 35 N. Y. S. 62.)

Part Payment—Where Party Prevented from Completing Contract.—The general rule is that, where one who hires a contractor prevents him from completing his contract, the contractor may recover for the work already done according to the contract. (*Thacke* v. *Hensheim*, 115 N. Y. S. 216.)

Tender of Payment.—A tender made after suit is brought is available only in mitigation of damages. (*Brand* v. *Weir*, 57 N. Y. S. 731.)

Burden of Proof in Performance.—The burden of proof that performance is in accordance with the contract is on the plaintiff not on the defendant to show non-performance. (*McElraevy & Hauck* v. *St. Joseph's Home for Girls*, 143 N. Y. S. 235.)

Action on Partly Performed Contract.—Where one who partly performs a contract is prevented from complete performance by the act of the other party, his redress is by an action for damages for breach of the contract, alleging defendant's prevention of performance, or on *quantum meruit* for so much of the work as is done, and not by an action on the contract itself. (*Toher* v. *Schaefer*, 91 N. Y. S. 3.)

2. DISCHARGE BY AGREEMENT.—Contracts may be discharged by mutual agreement. This may be done by

1. A new agreement to supersede the original one, or
2. The original contract may provide for discharge on the happening of a condition subsequent.

Such agreements must possess all the elements necessary to support a contract.

New Agreement.—This is in effect a new contract if expressly substituted for the old one, or where the new contract is inconsistent with the old one. In either case the original contract is discharged by agreement.

New Agreement—Novation.—Where a third person is brought into the substituted agreement to take the place of one of the original parties, with the consent of all three, the new substituted agreement is called a **novation.** The consideration of each party for the new contract consists of the creation of new rights and liabilities and the extinction of the old ones. (*Ford* v. *Adams*, 2 Barb. [N. Y.] 349.)

Contracts Which Cannot be Discharged by Agreement.—Contracts for the benefit of third parties cannot be discharged by agreement of the original parties where the third party has been notified and has accepted it. To obtain the discharge of such contracts the consent of the third party is necessary.

3. DISCHARGE BY BREACH.—A breach of contract gives the injured party a right of action and generally discharges the contract. Such breach may be by

1. Failure of one of the parties to perform.
2. Refusal of one of the parties to perform.
3. One of the parties doing something which renders performance impossible.
4. Denial of the contract

Failure to Perform.—To entitle a person to bring an action for failure to perform, he must have done all that can be done. Where time is of the essence, failure to complete within the time is a breach. If the contract is divisible, the failure to perform one part does not excuse the other party from performing the rest.

Refusal to Perform.—Refusal to perform by one party within the time for performance relieves the other party from further obligation, and he has the right to sue at once for the damages he has sustained.

Denial of Contract.—There must be an unqualified and definite renunciation, not a mere expression of intention not to perform. (*Drugley* v. *Olen*, 117 U. S.)

Burden of Proof.—In an action for breach of contract the burden of proving the breach is on the plaintiff. (*Devlin* v. *City of New York*, 124 App. Div. 184.)

Anticipatory Breach.—Where a contract, wholly executory, is rendered impossible of performance by a voluntary act by one of the parties the act constitutes an anticipatory breach for which an action will lie. (*Ga Nun* v. *Palmer*, 202 N. Y. 483.)

Breach by Renunciation.—Where one party of an executory contract renounces it, the other party may sue for a breach, although the time for performance has not arrived. (*Berstein* v. *Meech*, 130 N. Y. 354.)

4. DISCHARGE BY OPERATION OF LAW.—Contracts may be discharged by operation of law. This may be bankruptcy, alteration of the written instrument, or merger.

Bankruptcy.—Under the bankruptcy law the debtor is released of debts and liabilities provable under the statute where the bankrupt has obtained his discharge.

Alteration of Written Instrument.—Alteration means some erasure or addition which changes the meaning of the contract. It must relate to a material part and must have been intentionally made by one of the parties to the contract without the consent of the other party.

Merger.—The acceptance of a higher security for a lower one, where the parties are the same and the subject matter of the two securities is identical, results in the discharge of the original contract. This refers to cases where a judgment is recovered by one of the parties suing on a contract, or a sealed contract made by the parties covering the same transaction in an existing written instrument.

Modification.—A written contract may be modified before performance by parol agreement or understanding. (*Solomon* v. *Vallette*, 152 N. Y. 147.)

5. DISCHARGE BY IMPOSSIBILITY OF PERFORMANCE.—Impossibility of performance does not discharge a contract except where there is a legal impossibility or a physical inability in certain cases.

Legal Impossibility.—Where a statute enacted subsequent to the making of the contract renders the performance impossible without a violation of the law, the contract is discharged.

Physical Inability.—Destruction of the subject matter where the contract relates to a specific article or incapacity of the party where the contract was for personal service discharges the contract on the ground of impossibility of performance.

Statutes of Fraud

GENERAL.—Practically all states have statutes of fraud, modelled after the **old English law of 1676** called "an act for Prevention of Frauds and Perjuries," which requires **written evidence** of certain transactions.

PURPOSE.—The purpose of these laws, as the name implies, is to prevent fraud and perjury in contractual obligations by requiring certain transactions to be evidenced by writing.

"Its purpose is to prevent the assertion of fictitious and fraudulent contractual obligations and rights by requiring that, to be enforceable, certain classes of contracts must either be reduced to a written agreement signed by the party to be charged therewith or, at least, be supported by a written admission by the party to be charged of all the essential elements of the oral contract." (*Truskett* v. *Rice Bros. Line Stock Comm. Co.*, 180 S. W. [Mo.] 1048.)

SUMMARY OF THE STATUTES.—The statutes of the several states vary somewhat in their wording and minor details but agree in the essentials.

CONTRACTS REQUIRED TO BE IN WRITING.—Under the statute the following contracts to be enforcible must be in writing and signed by the person to be charged:

1. Promises or contracts of executors and administrators to pay out of their personal estate debts due from the estate they are administering.
2. Contracts not to be performed within one year from the making thereof. This refers to contracts which cannot be completed within the year.

The statute does not apply to contracts which may be performed within a year but may possibly extend beyond the year. The general interpretation of the rule to bring contracts under the statute is that it must appear by their terms that performance cannot be completed within a year from the time the contract is made.

3. Promises to answer for the debt, default or miscarriage of another. This refers to suretyship and guaranty. The promise must be made to the creditor and there must be a present and prospective liability. To be within the statute the liability of the original debtor must continue and the promisor's liability become collateral. A release of the original debtor is a novation and takes it out of the statute, hence it need not be in writing.
4. Promises made in consideration of marriage, except mutual promises. This refers to promises to pay money, transfer property, make a marriage settlement or other act in consideration of a marriage taking place, but does not refer to the promise to marry. (*Lloyd* v. *Fulton*, 91 U. S. 479.)
5. A promise to pay a debt discharged in bankruptcy.
6. A contract for the sale of personal property over a fixed amount, which varies in the different states. (Explained more fully under "Sales.")
7. A contract for the sale of lands, tenements and hereditaments or any interest in them. This refers to the contract to sell and not the deed conveying title, which must be in writing and generally sealed. The natural growth and product of land are an interest in land, and contracts to sell or buy such must be in writing. Crops or other products of the land raised by cultivation and labor are not an interest in land, their sale need not be in writing. A lease or rental agreement for more than one year must be in writing. An easement (*Mumford* v. *Whitney*, 15 Wend. [N. Y.] 380) and right of way (*Bonelli* v. *Blackmore*, 66 Miss. 136) are interest in land and must be in writing.

1. PROMISES BY EXECUTORS OR ADMINISTRATORS.—Promises or contracts of executors and administrators to pay out personally from their own property debts due from the estate they are administering must be in writing, otherwise they are not enforcible at law.

The statutes of California, Colorado, Minnesota, Nevada and Wisconsin omit this section. In Rhode Island this section applies also to trustees of express trusts as well as to executors and administrators. In Georgia the promises of a guardian or trustee are included in this section. In Delaware promises to pay five dollars or less are not within the statute and promises to pay up to $25 may be proved on oath or affirmation of one or more credible witnesses.

2. AGREEMENTS NOT TO BE PERFORMED WITHIN ONE YEAR.—Any agreement that is not to be performed within the space of one year from the making thereof must be in writing to be enforcible. This refers to contracts which cannot be completed within a year. The general interpretation of the rule to bring contracts under the statute is that it must appear by their terms that performance cannot be completed within a year from the time the contract is made.

In Pennsylvania and North Carolina this provision is omitted from the statute.

An oral agreement not to be performed within a year is invalid under the statute of frauds. (*Goldberg* v. *Cohen*, 110 N. Y. S. 185.) An oral contract of

employment for three years comes under the statute and is void. (*Roen* v. *M. Philipsborn Co.*, 135 App. Div. [N. Y.] 499.)

A contract of employment in which no definite time is agreed to when the term of service should terminate or how long it should continue is not an agreement which by its terms cannot be performed within a year. (*Jagan* v. *Goetz*, 32 N. Y. S. 144.)

A contract to employ another for a year, the service to commence at a future date, is void under the statute of frauds if not in writing. (*Baker* v. *Codding*, 21 N. Y. S. 1131.) Where, however, the service begins the next day, it is held in New York to be enforcible although not in writing. (*Prokop* v. *Bedford Waist & Dress Co.*, 187 App. Div. 662.)

Partial Deliveries.—A contract for the manufacture of goods to be delivered as required is not within the statute if there is nothing in its terms inconsistent with complete performance within a year even though the completion of the contract may extend beyond a year. (*Warren Chemical & Manufacturing Co.* v. *Holbrook*, 118 N. Y. 586.)

Instalment Contracts.—Contracts on instalments, either payments or deliveries, which from their terms extend beyond one year for their completion, are within the statute and must be in writing.

3. DEBT OF THIRD PERSON.—Promises to answer for the debt, default or miscarriage of another must be in writing. To be within the statute the promise must be made to the creditor and there must be a present or prospective liability. The obligation of the original debtor must continue and the promisor's liability becomes collateral.

A guaranty of payment if the debtor does not pay must be in writing and if not is void under the statute. (*Byrne* v. *Wheeler*, 147 N. Y. S. 82.)

Original and Collateral Promises.—Where the liability is collateral and not primary, in order to hold the promisor liable for payment the promise must be in writing. (*Higley* v. *Bergholz*, 44 App. Div. [N. Y.] 638.)

Where a stockholder of a corporation who was not individually liable for the debts of the company promises to make good what the company failed to pay a third person, there is placed on the promisor a collateral liability which is not enforcible if not in writing. (*Winne* v. *Mehrbach*, 130 App. Div. [N. Y.] 329.)

A promise by the officers of a corporation, for whom a building was being erected, to answer for the purchase price of material sold to the contractor for the construction of the building, was a promise to answer for the debt of a third person and under the statute of frauds must be in writing in order to hold the officers individually liable. (*Roscoe Lumber Co.* v. *Reynolds*, 124 App. Div. [N. Y.] 539.)

An agreement made by a person for whom a building was being constructed, to see that the workmen of a contractor were paid, was a promise to pay for the debt of another and if not in writing was void under the statute. (*Dirringer* v. *Moynihan*, 10 N. Y. S. 540.)

In purchasing a business where a promise is made to assume a debt of the seller for goods delivered this is not a promise to pay for the debt of another but an original undertaking and need not be in writing to become binding on the purchaser. (*Ackley* v. *Shirmer*, 120 N. Y. S. 1105.)

Where a member of a firm agrees to pay out of his own personal funds additional compensation to an employe as an inducement to continue his services is not a promise to answer for the debt of another but is an original promise and need not be in writing to be binding on the promisor. (*Barrett* v. *Johnson*, 28 N. Y. S. 892.)

When a partner retires from a firm and a new incoming partner forms a new partnership which assumes the old firm's debts, the obligation is original and not one to pay for the default of another. Such a promise does not come within the statute and need not be in writing. The agreement is not to pay on default of the old firm but to pay at all events. (*Wright* v. *Carman*, 19 N. Y. S. 696.)

Original Promises not Under the Statute.—Original promises are not within the statute, for if there is an original promise it is a liability of the promisor and not of a third person. **In Pennsylvania,** oral promises to pay for the default of third persons are valid when the amount does not exceed $20.

4. CONSIDERATION OF MARRIAGE.—Under this section promises to transfer property or pay money in case of marriage must be in writing. An oral ante-nuptial agreement is void. (*McCartney* v. *Titsworth*, 142 App. Div. [N. Y.] 292.) This provision is omitted in Pennsylvania and North Carolina.

5. A PROMISE TO PAY A DEBT DISCHARGED IN BANKRUPTCY.—In order to hold a promisor on a debt previously discharged in bankruptcy, the promise must be in writing. Oral promises are not enforcible as they do not comply with the requirements of the Statute of Frauds.

6. SALE OF GOODS.—Contracts for the sale of personal property for more than a fixed amount, which varies in different states, must be in writing unless part of the property is delivered or part of the price is paid.

Specified Value in Different States.—The statutes of the various states apply in the sale of personal property as follows:

Alaska	$ 50	Maryland	$ 50	North Dakota	$ 500
Arizona	500	Massachusetts	500	Ohio	2,500
Arkansas	30	Michigan	50	Oklahoma	50
California	200	Minnesota	50	Oregon	50
Colorado	50	Mississippi	50	Pennsylvania	500
Connecticut	100	Missouri	30	Rhode Island	500
District of Columbia	50	Montana	200	South Carolina	50
Georgia	50	Nebraska	500	South Dakota	50
Hawaii	100	Nevada	50	Utah	500
Idaho	200	New Hampshire	33	Vermont	50
Illinois	500	New Jersey	500	Washington	50
Indiana	50	New Mexico	50	Wisconsin	50
Maine	30	New York	50	Wyoming	50

Goods to be Manufactured.—A contract for the sale of articles to be manufactured and delivered, which are not suitable for sale in the ordinary course of the seller's business, does not come within the statute but is a contract for work and labor. (*Goldowitz* v. *Henry Kupfer & Co.*, 141 N. Y. S. 531.) The foregoing principle is applied in the following states:

Alaska	Maryland	New York
Arizona	Massachusetts	Ohio
Connecticut	Michigan	Oregon
Illinois	Nevada	Pennsylvania
Indiana	New Jersey	Rhode Island
Iowa		Wisconsin

Partial Delivery and Acceptance.—The receipt and acceptance by the buyer of part of the goods takes the case out of the statute and written memorandum is not required. (*MacEvoy* v. *Aronson*, 92 N. Y. S. 724.) To satisfy the statute of frauds delivery by the seller is not sufficient but there must be an actual acceptance by the purchaser with the intention of taking possession of the property as owner. (*Drake Hardware Co.* v. *De Witt*, 126 N. Y. S. 868.)

Partial Payment.—The statute of frauds is satisfied where there is a partial payment of the sales price. (*Reilly* v. *Steinhardt*, 111 N. Y. S. 472.)

7. SALE OF AN INTEREST IN LAND.—Contracts for the sale of lands, tenements, hereditaments or any interest in them must be in writing to be enforcible.

Real Estate.—A contract for the purchase or sale of real estate must be in writing. This should be distinguished from the deed conveying title which must be in writing and in some states under seal. The purpose of this section of the statute of frauds is to accurately and definitely settle terms and conditions of sales of real estate. (*Reisterer* v. *Reisterer*, 143 N. Y. S. 307.)

An agreement to purchase old buildings and to remove them from the land on which they stood was a contract for the sale of an interest in land within the statute and must be in writing to be enforcible. (*Volk* v. *Olsen*, 104 N. Y. S. 415.)

Mortgages.—Under this section, mortgages being an interest in land must be in writing.

Leases.—Leases are an interest in lands and to be enforcible must be in writing if they extend beyond the statutory limit.

Leases not exceeding one year which are not in writing are valid in the following states and territories:

Alabama	Kansas	Oregon
Alaska	Kentucky	Rhode Island
Arizona	Maine	South Carolina
Arkansas	Massachusetts	South Dakota
California	Michigan	Tennessee
Colorado	Minnesota	Texas
Connecticut	Mississippi	Utah
Delaware	Missouri	Vermont
District of Columbia	Montana	Virginia
Georgia	Nebraska	Washington
Idaho	Nevada	West Virginia
Illinois	New York	Wisconsin
Iowa	North Dakota	Wyoming
	Oklahoma	

Oral leases not exceeding three years are valid in the following states:

Indiana	New Jersey	North Carolina
Maryland	New Mexico	Ohio
New Hampshire		Pennsylvania

Assignment of Leases.—An assignment of a lease for more than one year to be valid must be in writing under the statute. (*Moskowitz* v. *Eastern Brewing Co.*, 117 N. Y. S. 1017.)

Assignments of Rents.—An assignment of rent must be in writing under the statute of frauds because rent is an incident of ownership of real estate. (*King* v. *Kaiser*, 23 N. Y. S. 21.)

Authority of Agent.—An agent making a contract for the purchase or sale of an interest in land must have authority in writing in the following states:

Alabama	Illinois	North Dakota
Alaska	Kansas	Ohio
Arizona	Kentucky	Oklahoma
California	Michigan	Oregon
Colorado	Minnesota	Pennsylvania
Delaware	Missouri	South Carolina
Florida	Montana	South Dakota
Idaho	Nebraska	Washington
	New York	

Employment of Real Estate Agent or Broker.—Agreements employing real estate agents or brokers for the purchase or sale of real estate must be in writing in the following states:

California	Montana
Idaho	Oregon
Michigan	Washington

REQUISITES OF WRITING.—Contracts to be enforcible under the statutes of frauds must be in writing and **signed** by the person to be charged.

Need Not be the Contract.—The memorandum required in writing under the statute need not of itself constitute the contract. Any writing signed by the person to be charged in which he admits that he entered into an agreement is sufficient. (*Spiegel* v. *Lowenstein*, 147 N. Y. S. 655.)

Writing Must Contain Essentials.—The memorandum must contain all the essential terms of the contract and cannot be eked out by oral proof. (*Leach* v. *Weil*, 114 N. Y. S. 234.) The terms must be set forth with reasonable certainty either in the memorandum itself or in some other writing referred to therein, without the aid of parol evidence. (*Poel* v. *Brunswick-Balke-Collender Co. of N. Y.*, 159 App. Div. [N. Y.] 365.)

Separate Writings.—To satisfy the statute of frauds it is not necessary that terms of the contract of sale shall be contained in a single document but compliance with the statute may be found in several instruments and may also be derived from letters to third persons connected with the sale.

Signature.—Must be signed by the person to be charged. Where the memorandum of sale is signed by the vendor only it is insufficient (*Reilly* v. *Steinhardt*, 126 App. Div. [N. Y.] 909.) The actual signature at the end of the agreement will be sufficient under the statute of frauds where the signature is made by a rubber stamp or by the use of a printed name when it is intended to be used as a signature. (*Reilly* v. *Steinhardt*, 126 App. Div. [N. Y.] 909.)

Pleadings.—The statute of frauds must be pleaded if it is to be relied on as a defense. When it is not pleaded and no objections raised at the trial the statute is waived. (*Simis* v. *Wissel*, 10 App. Div. [N. Y.] 323.)

A Personal Defense.—The statute of frauds is a personal defense which cannot be availed of by a third person to avoid the contract. (*Stitt* v. *Ward*, 142 App. Div. 626.)

Negotiable Instruments

DEFINITION.—"An instrument is called negotiable when the legal title to the instrument itself, and the whole amount of money expressed upon its face, may be transferred from one to another by indorsement and delivered by the holder or by delivery only." (Daniels on Negotiable Instruments.)

Presumption of Consideration.—Consideration in negotiable instruments is presumed conclusively between remote parties but subject to rebuttal between immediate parties.

Negotiability.—Negotiability is that quality whereby, (1) the legal title is transferrred by indorsement and delivery or by delivery only; and (2) the transferee obtains a good title provided he is a purchaser for value without any notice of the infirmity of the instrument (*Evertson* v. *Bank*, 66 N. Y. 14) even though the title of his transferor was defective. Ordinary contracts pass by assignment, the assignee being subject to all the defenses that may exist between the original parties.

IMPORTANCE OF NEGOTIABILITY.—The rights of holders of negotiable instruments who are bona fide purchasers in due course are more protected against defenses by the maker than in the case of non-negotiable instruments.

Non-negotiable instruments are merely contracts in one form or another wherein title passes only by assignment, the assignee being subject to all the defenses that may exist between the original parties.

REQUISITES OF NEGOTIABILITY.—An instrument to be negotiable must be in writing, signed by the maker or drawer, and must contain an unconditional order or promise to pay a sum certain in money on demand or at a fixed or determinable future time. **Delivery** is an important element but delivery is presumed if the instrument is in the hands of a holder in due course.

Negotiability is not affected by:

1. Want of **date.**
2. Failure to specify **consideration.**
3. Failure to specify **place** where it is drawn or is payable.
4. Presence or lack of a **seal.**
5. Designation of **a particular kind of current money** in which payment is to be made.
6. **Ante-dating** or **post-dating** an instrument unless done for a fraudulent purpose.

Negotiation—How Accomplished.—An instrument payable to bearer may be negotiated by delivery; if payable to order, by indorsement and delivery.

INDORSEMENT must be written on the instrument or on a paper attached to it called an **"allonge."**

Indorsement may be:

In blank—by signature of the indorser without additional words.
Qualified—by addition of the words "without recourse."
Restrictive—by indorsing to a given person; further negotiation requires that person's indorsement.

Where payable to two or more persons all must indorse, unless they are partners or one has authority to act for the others.

Accommodation Indorser.—A person who signs an instrument without receiving a consideration and for the purpose of lending his name to another is deemed an accommodation indorser.

Liability of accommodation indorser to a holder for value is the same as that of any other indorser, even though the holder knew him to be only an accommodation party.

PERSONS LIABLE ON NEGOTIABLE INSTRUMENTS.—The only persons directly liable on negotiable instruments are those whose names appear thereon as maker, drawer, acceptor or indorser. But blanket guaranties are sometimes lodged with bankers, under which someone in interest promises to pay all promissory notes discounted by parties named in the guarantee, if not paid by the makers.

WARRANTEES.—All indorsers and persons negotiating an instrument by delivery impliedly warrant:

1. That the instrument is genuine,
2. That their title is good, and
3. That prior parties had capacity to contract.

Holder in due course is a bona fide holder for value before maturity without notice of possible defenses.

CLASSIFICATION OF NEGOTIABLE INSTRUMENTS.—Although there are many kinds of negotiable instruments, they may be broadly classified as: (1) promissory notes, and (2) bills of exchange.

Promissory Notes.—A promissory note is an unconditional written promise signed by the maker, to pay a sum certain in money, at a fixed or definite future time, either to the bearer or to the order of a person designated therein. (Daniels Neg. Inst., § 28; Neg. Inst. Law, N. Y., § 320; Chalmers Bills and Notes, § 291.)

Bills of Exchange.—"A bill of exchange is an unconditional order in writing upon one person by another for the payment of a sum of money absolutely and at all events." (Chalmers Bills and Notes, § 1; Neg. Inst. Law, N. Y., § 210.) "A **check** is a bill of exchange drawn on a bank payable on demand." (Neg. Inst. Law, N. Y., § 321.)

Foreign Bill of Exchange.—A foreign bill of exchange is one drawn by a person residing in a foreign country or one of the states of the United States and payable in another state or foreign country.

Inland Bill of Exchange.—An inland bill of exchange is a bill payable within the state in which it is drawn. Unless the contrary appears on the face of the bill, the holder may treat it as an inland bill. (See Neg. Inst. Law, N. Y., § 213, page 33.)

PRESENTATION AND DEMAND FOR PAYMENT.—This must be made in accordance with the terms of the instrument in order to charge the drawer and indorsers. In time bills this must be done on the day of maturity, or, if that is a holiday, the first business day thereafter. Instruments payable on demand must be presented within a reasonable time after issue.

Presentation must also be made within reasonable business hours which, if the instrument is payable at a bank, must be before the bank closes.

Protest.—In order to hold indorsers, it is necessary to protest foreign bills of exchange in the event of non-payment. Protest is not necessary on inland bills of exchange.

Desirability of Protest.—Although not required as to inland bills of exchange, should there be a possibility of legal action, the use of a certificate of protest is prima facie evidence of presentation, demand and non-payment.

Time of Payment.—The time of payment is computed by excluding the day of issue and including the day of payment. When the day of maturity falls on a Sunday or legal holiday, the instrument is payable on the next business day.

Discharge of Instrument.—Negotiable instruments may be discharged by payment, intentional cancellation by the holder, by the maker or principal debtor becoming the holder, or such other act as would discharge a contract for the payment of money.

Discharge of Indorser.—Indorsers are discharged from liability by any act which discharges a prior party on the instrument; by a valid tender of payment by a prior party; by release of the principal debtor unless the right of recourse is expressly reserved; and by extension of the time the instrument runs without the consent of the indorsers.

RULES OF CONSTRUCTION AND INTERPRETATION.—Where words and figures are in conflict, the **words govern.** Where **instrument is undated,** the date it is issued is considered its true date. Where writing and printing are at variance, the **written provisions control.**

Ambiguous instruments when there is question as to whether the instrument is a bill or a note, the holder may treat it as either.

If capacity of signer is not clear, he is deemed **an indorser.** Instruments signed by two or more persons containing the words **"I promise to pay"** makes them jointly and severally liable.

ESSENTIALS AND DETAILS.—Up to this point only some of the more important essentials of the law on Negotiable Instruments were mentioned. In view, however, of the importance of the subject to the financial manager, it is deemed best to present the law practically in its entirety with such annotations as the various subdivisions warranted. For this purpose permission has been obtained from the Ronald Press to reprint parts of the law on Negotiable Instruments as it appeared in the Accountants' Handbook (pages 33 to 53) supplemented by additional annotations which appear on pages 448 to 457 herein.

UNIFORM NEGOTIABLE INSTRUMENTS LAW.—The law governing negotiable instruments developed from the custom of merchants and was gradually incorporated into the common law of the land and referred to as the **Law Merchant.** During the past century the common law on negotiable instruments has been codified from time to time in nearly every jurisdiction founded on Anglo-Saxon jurisprudence. At present all the states of the United States, with the exception of Georgia, have adopted the Uniform Negotiable Instruments Law as devised by the commissioners appointed for that purpose.

"The Negotiable Instrument Act was adopted by the several states for the purpose of establishing uniformity in the law regulating negotiable instruments. Where the act speaks, it controls and its meaning should be ascertained by interpreting the language used, and not by assuming that the common law on the subject should remain unaltered." (*First State Bank* v. *Williams*, 164, Ky. 143.) Although the statute generally known as "The Negotiable Instruments Law" supersedes the common law, it is at times necessary to refer to the common law for a correct interpretation of the statute.

The New York Negotiable Instruments Law is followed with reference to the numbering of sections. Sections of the law are quoted in their entirety in some instances; in others a comprehensive digest adhering as close to the statute as possible is set forth. Court decisions and comments interpreting the statute are given immediately after a number of sections of the law.

GENERAL REQUIREMENTS—FORM OF INSTRUMENT.—

§ 20. *Form of negotiable instrument.*—An instrument to be negotiable must conform to the following requirements:

1. It must be in writing and signed by the maker or drawer.
2. Must contain an unconditional promise or order to pay a sum certain in money.
3. Must be payable on demand, or at a fixed or determinable future time.
4. Must be payable to order or to bearer; and
5. Where the instrument is addressed to a drawee, he must be named or otherwise indicated therein with reasonable certainty.

Writing.—May be with pencil, ink, crayon, or any means to record a signature (*Brayley* v. *Kelly*, 25 Minn. 160.)

Signature.—May be any mark, initial, name, code or designation a party may chose to adopt and intend to bind himself. (*Palmer* v. *Stephens*, 1 Denio [N. Y.] 471; *Merchants Bank* v. *Spicer*, 6 Wend. [N. Y.] 443.)

Order.—The words **to order, to bearer,** or equivalent words must be used to make an instrument negotiable. (*Wettlaufer* v. *Baxter*, 137 Ky. 362.) An

instrument payable to a named person and not payable to order is not negotiable. (*Owens* v. *Blackburn*, 161 App. Div. [N. Y.] 827.) A note payable to the estate of a certain person on his death is not payable to order and is not negotiable. (*Kerr* v. *Smith*, 156 App. Div. [N. Y.] 807.) An instrument wherein either bearer or order of a named **person is not indicated,** is not a negotiable instrument. (*St. Lawrence Co. Bank* v. *Watkins*, 153 App. Div. [N. Y.] 551.)

CERTAINTY AS TO SUM.—

§ 21. *Certainty as to sum; what constitutes.*—The sum payable is a sum certain within the meaning of this act, although it is to be paid:

1. With interest; or
2. By stated instalments; or
3. By stated instalments, with a provision that upon default in payment of any instalment or of interest, the whole shall become due; or
4. With exchange, whether at a fixed rate or at the current rate; or
5. With costs of collection or an attorney's fee, in case payment shall not be made at maturity.

Sum Certain.—A sum which can be rendered certain by computation.

Instalments.—Negotiability is not affected by instalment payments. (*Riker* v. *Manufacturing Co.*, 14 R. I. 402; *Hodge* v. *Wallace*, 129 Wis. 84.)

Exchange.—Most of the courts have passed on the subject. (*Second Nat. Bank of Aurora* v. *Basnier*, 165 Fed. Rep. 58.)

Attorney's Fees.—A provision in a note to pay attorney's fees in case of non-payment, suit, or after maturity does not destroy its negotiability. (*Valparaiso Farmers Nat. Bank* v. *Sultan Mfg. Co.*, 52 Fed. 191; *Mechanics American Nat. Bank* v. *Coleman*, 204 Fed Rep. 24.)

"Upon a careful review of the authorities, we can perceive no reason why a note otherwise imbued with all the attributes of negotiability is rendered non-negotiable by a stipulation which is entirely inoperative until after the maturity of the note and its dishonor by the maker. The amount to be paid is certain during the currency of the note as a negotiable instrument and it only becomes uncertain after it ceases to be negotiable by default of the maker in its payment. It is just that the creditor who has incurred an expense in the collection of the debt should be reimbursed by the debtor by whom the action was rendered necessary and the expenses entailed. (*Oppenheimer* v. *Farmers & Mechanics Bank*, 97 Tenn. 19.)

PROMISE TO PAY UNCONDITIONAL.—

§ 22. *When promise is unconditional.*—An unqualified order or promise to pay is unconditional within the meaning of this act, though coupled with:

1. An indication of a particular fund out of which reimbursement is to be made, or a particular account to be debited with the amount; or
2. A statement of the transaction which gives rise to the instrument.

But an order or promise to pay out of a particular fund is not unconditional.

Particular Fund Indicated.—Payment out of a particular fund destroys the negotiability of an instrument. (*Munger* v. *Shannon*, 61 N. Y. 251.)

Reimbursement out of a particular fund does not destroy negotiability. (*Smittler* v. *Simon*, 101 N. Y. 554)

The Test.—The determining factor is whether the drawee is limited to a particular fund or whether he can charge the amount of the bill against the general account of the drawer when the specific fund named in the instrument is insufficient to satisfy the instrument. (*Munger* v. *Shannon*, 61 N. Y. 251.)

Statement of transaction in the instrument does not affect negotiability. Such provisions are generally found in railway equipment notes. (*Chicago Ry. Equip. Co.* v. *Mechanics Nat. Bank*, 136 U. S. 268.)

Contingency in Statement of Transaction.—A note issued containing a statement of the transaction on which it was issued and where the contents of the note are dependent on the outcome of a contract referred to therein is not a negotiable instrument under the law. (*Pope* v. *Lumber Co.*, 162 N. C. 206.)

TIME OF PAYMENT.—

§ 23. *Determinable future time; what constitutes.*—An instrument is payable at a determinable future time, within the meaning of this act, which is expressed to be payable:

1. At a fixed period after date or sight; or

2. On or before a fixed or determinable future time specified therein; or

3. On or at a fixed period after the occurrence of a specified event, which is certain to happen, though the time of happening be uncertain.

An instrument payable upon a contingency is not negotiable, and the happening of the event does not cure the defect.

Certainty of Time.—There must be a fixed or ascertainable future time or a time which can be computed after the occurrence of an event certain to happen although the time of happening may be uncertain.

Fixed Time.—Must be indicated in the instrument. (*Citizens Nat. Bank* v. *Piolett*, 126 Pa. St. 194; *Akley School District* v. *Hall*, 113 U. S. 135.)

Future Time—Events Certain to Happen.—A note payable **at death** or a given number of days or months after death of the maker is a promissory note under the statute, because death is certain although the time is uncertain. (*Crider* v. *Shelby*, 95 Fed. 212; *Hegeman* v. *Moon*, 131 N. Y. 462.)

Contingent Time—Marriage, Age, etc.—Notes payable when a person marries, becomes of age, or when his ship comes in, are not within the statute, as the time depends on a contingency which may never happen. (*Husband* v. *Epling*, 81 Ill. 172; *Sloan* v. *McCarty*, 134 Mass. 245; *Rice* v. *Rice*, 43 App. Div. [N. Y.] 458.)

ADDITIONAL PROVISIONS IN INSTRUMENT.—

§ 24. *Additional provisions not affecting negotiability.*—An instrument which contains an order or promise to do any act in addition to the payment of money is not negotiable. But the negotiable character of an instrument otherwise negotiable is not affected by a provision which:

1. Authorizes the sale of collateral securities in case the instrument be not paid at maturity; or

2. Authorizes a confession of judgment if the instrument be not paid at maturity; or

3. Waives the benefit of any law intended for the advantage or protection of the obligor; or

4. Gives the holder an election to require something to be done in lieu of payment of money.

But nothing in this section shall validate any provision or stipulation otherwise illegal.

Collateral Security.—Negotiability is not affected by a recital in the note that collateral security has been deposited for the security of the note which is to be sold if the note is not paid at maturity. (*Perry* v. *Bigelow*, 128 Mass. 129.)

Judgment Notes.—Are in use in some states. In others, as New York, they are unknown. Confession of judgment is effective only at maturity.

Where a note authorizes confession of judgment before maturity, it is not a negotiable instrument under the statute. (*First Nat. Bank of Elgin* v. *Russell*, 124 Tenn. 618.)

Holders' Election.—Where the holder has the election the instrument is within the law. If, however, the maker has the alternative of paying money or something else, the instrument is not negotiable. (*Hosstatter* v. *Wilson*, 36 Barb. [N. Y.] 307.)

OMISSIONS; SEAL; PARTICULAR MONEY; SPECIAL CONSIDERATION.—

§ 25. *Omissions; seal; particular money.*—The validity and negotiable character of an instrument are not affected by the fact that:

1. It is not dated; or
2. Does not specify the value given, or that any value has been given therefor; or
3. Does not specify the place where it is drawn or the place where it is payable; or
4. Bears a seal; or
5. Designates a particular kind of current money in which payment is to be made.

But nothing in this section shall alter or repeal any statute requiring in certain cases the nature of the consideration to be stated in the instrument.

Absence of Date.—See § 32 of the law. (*Church* v. *Stevens*, 107 N. Y. Supp. 310.)

Value Not Stated.—Value presumed. (See Daniels Neg. Inst., § 108.) (*McLeod* v. *Hunter*, 29 Misc. [N. Y.] 558.)

Seal.—Seal is surplusage. Negotiability not affected. (*Chase Nat. Bank* v. *Faurot*, 149 N. Y. 532; *Weeks* v. *Esler*, 143 N. Y. 374.)

Particular Kind of Money.—Negotiability not affected if the instrument is to be paid in gold, or bank notes, or other current money. (*Chrysler* v. *Renais*, 43 N. Y. 209.)

Nature of Consideration in Certain Cases.—Some states require that where an instrument is given for a patent right or a speculative consideration, it shall be so stated in the note. (See Neg. Inst. Law, § 330–332.)

WHEN PAYABLE ON DEMAND.—

§ 26. *When payable on demand.*—An instrument is payable on demand:

1. Where it is expressed to be payable on demand, or at sight, or on presentation; or
2. In which no time for payment is expressed.

Where an instrument is issued, accepted or indorsed when overdue, it is, as regards the person so issuing, accepting or indorsing it, payable on demand.

Where No Time Is Expressed.—The words **on demand** may be added without affecting the instrument. (Byles on Bills and Notes, § 210.)

Overdue Instruments.—A holder of overdue instruments which were negotiated before maturity can sue thereon in his own name. (*French* v. *Jarvis*, 29 Conn. 353.)

WHEN PAYABLE TO ORDER.—

§ 27. *When payable to order.*—The instrument is payable to order where it is drawn payable to the order of a specified person or to him or his order. It may be drawn payable to the order of:

1. A payee who is not maker, drawer or drawee; or
2. The drawer or maker; or
3. The drawee; or
4. Two or more payees jointly; or
5. One or some of several payees; or
6. The holder of an office for the time being.

Where the instrument is payable to order the payee must be named or otherwise indicated therein with reasonable certainty.

Specified Person Only.—An instrument payable to a specified person only without the word **order** is not negotiable. (Byles on Bills and Notes, page 83.)

Payable to Maker.—Is not complete without indorsement and delivery.

Indorsement in the Alternative.—A note payable to either of two persons may be indorsed by either. (*Passut* v. *Heubner*, 81 Misc. [N. Y.] 14.)

Holder of an Office.—A note payable to a holder of an office or his successor is negotiable. (*Davis* v. *Gorr*, 6 N. Y. 124.)

Payee Indicated.—Need not be by name but may be done in any way to indicate his identity. (*U. S.* v. *White*, 2 Hill 59.)

WHEN PAYABLE TO BEARER.—

§ 28. *When payable to bearer.*—The instrument is payable to bearer:
1. When it is expressed to be so payable; or
2. When it is payable to a person named therein or bearer; or
3. When it is payable to the order of a fictitious or non-existing person, and such fact was known to the person making it so payable; or
4. When the name of the payee does not purport to be the name of any person; or
5. When the only or last indorsement is an indorsement in blank.

Fictitious or Non-existing Persons.—Must be known as such to the maker. A fraudulent representation as to the identity of the payee is not a fictitious person. (*Hartford* v. *Greenwich Bank*, 215 N. Y. 726.) If drawn to an existing person but the maker did not intend that it should be delivered, or indorsed by that person, the instrument is deemed to be payable to a fictitious person and therefore to the bearer. (*Trust Co. of America* v. *Hamilton Bank*, 127 App. Div. [N. Y.] 515.)

Last Indorsement in Blank.—An indorsement in blank on a non-negotiable instrument does not render it negotiable under the law. (*Johnson* v. *Lassiter*, 155 N. C. 47.)

LANGUAGE USED.—

§ 29. *Terms when sufficient.*—The instrument need not follow the language of this act, but any terms are sufficient which clearly indicate an intention to conform to the requirements hereof.

Foreign Language.—An instrument, otherwise sufficient, drawn in a foreign language is within the statute. (*Debebian* v. *Gala*, 64 Md. 262.)

DATE.—

§ 30. *Date, presumption as to.*—Where the instrument or an acceptance or any indorsement thereon is dated, such date is deemed *prima facie* to be the true date of the making, drawing, acceptance or indorsement, as the case may be.

§ 31. *Ante-dated and post-dated.*—The instrument is not invalid for the reason only that it is ante-dated or post-dated, provided this is not done for an illegal or fraudulent purpose. The person to whom an instrument so dated is delivered acquires the title thereto as of the date of delivery.

An instrument **post-dated** or **ante-dated** for **an illegal purpose** is void to all persons having knowledge of it, otherwise it is good. (*Triphonoff* v. *Sweeney*, 65 Oregon 209; *Brewster* v. *McCardle*, 8 Wend. [N. Y.] 478.)

§ 32. *When date may be inserted.*—Where an instrument expressed to be payable at a fixed period after date is issued undated, or where the acceptance of an instrument payable at a fixed period after sight is undated, any holder may insert therein the true date of issue or acceptance, and the instrument shall be payable accordingly. The insertion of a wrong date does not avoid the instrument in the hands of a subse-

quent holder in due course; but as to him, the date so inserted is to be regarded as the true date.

Any holder may insert the true date of issue or acceptance of a valid undated instrument. The insertion of the wrong date does not avoid the instrument but the date so inserted is regarded as the true date to subsequent holders in due course. (*Redlich* v. *Doll*, 54 N. Y. 238; *Bank of Houston* v. *Day*, 145 Mo. App. 410.)

PLACE.—A negotiable instrument is presumed to be made at the place it is dated. (*Mfrs. Commercial Co.* v. *Blitz*, 131 App. Div. [N. Y.] 17.)

FILLING BLANKS AFTER DELIVERY.—

§ 33. *Blanks; when may be filled.*—Where the instrument is wanting in any material particular, the person in possession thereof has a *prima facie* authority to complete it by filling up the blanks therein. And a signature on a blank paper delivered by the person making the signature in order that the paper may be converted into a negotiable instrument operates as a *prima facie* authority to fill it up as such for any amount. In order, however, that any such instrument, when completed, may be enforced against any person who became a party thereto prior to its completion, it must be filled up strictly in accordance with the authority given and within a reasonable time. But if any such instrument, after completion, is negotiated to a holder in due course, it is valid and effectual for all purposes in his hands, and he may enforce it as if it had been filled up strictly in accordance with the authority given and within a reasonable time.

There are two different kinds of omissions or blank spaces in negotiable instruments which should be distinguished:

1. Blank spaces of such a nature that the instrument is incomplete until they are filled in.
2. Instruments apparently complete in context but with blank spaces which do not fill the paper.

The statute applies only to omissions indicated of the first kind. As to the second kind the decisions are in conflict. (*Nat. Exchange Bank* v. *Lester*, 194 N. Y. 461; *Yocum* v. *Smith*, 63 Ill. 321, *contra*.)

What, When and How Insertion Is to be Made.—Blanks must be filled up strictly in accordance with authority to complete the instruments in full, which must be done within a reasonable time. (*Weyerhauser* v. *Dunn*, 100 N. Y. 150.) As to a holder in due course an instrument is valid for all purposes where blanks are **filled up** but not in cases where there have been **alterations.** (*First Nat. Bank of Wilkes-Barre* v. *Barnum*, 160 Fed. Rep. 245.)

INCOMPLETE INSTRUMENT AND UNDELIVERED.—

§ 34. *Incomplete instrument not delivered.*—Where an incomplete instrument has not been delivered it will not, if completed and negotiated, without authority, be a valid contract in the hands of any holder, as against any person whose signature was placed thereon before delivery.

Stolen Instruments.—An instrument never actually delivered is not negotiated and there can be no recovery on it even in the hands of an innocent purchaser for value. Where an instrument is stolen before delivery, as where a blank check is stolen and then filled out and passed to a holder for value, no recovery can be had on it. (*Linick* v. *Nutting*, 140 App. Div. [N. Y.] 265.)

DELIVERY.—

§ 35. *Delivery; when effectual; when presumed.*—Every contract on a negotiable instrument is incomplete and revocable until delivery of the instrument for the purpose of giving effect thereto. As between immediate parties, and as regards a remote party other than a holder in due course, the delivery, in order to be effectual, must be made either by or under the authority of the party making, drawing, accepting or

indorsing, as the case may be; and in such case the delivery may be shown to have been conditional, or for a special purpose only, and not for the purpose of transferring the property in the instrument. But where the instrument is in the hands of a holder in due course, a valid delivery thereof by all parties prior to him so as to make them liable to him is conclusively presumed. And where the instrument is no longer in the possession of a party whose signature appears thereon, a valid and intentional delivery by him is presumed until the contrary is proved.

An instrument has no valid existence until delivered in accordance with the intent of the parties and takes effect from the time of delivery only. (*Grannis* v. *Stevens*, 216 N. Y. 583; *Burr* v. *Beekler*, 264 Ill. 230.)

Conditional Delivery.—Parol evidence between original parties regarding conditional delivery of instruments is admitted and is not considered as an attempt to modify a written instrument. (*Reynolds* v. *Robinson*, 110 N. Y. 654; *Hill* v. *Hall*, 191 Mass. 253.)

Holder in Due Course.—In the hands of a holder in due course delivery is conclusively presumed. (*Hibbs* v. *Brown*, 190 N. Y. 167.)

AMBIGUOUS CONSTRUCTION.—

§ 36. *Construction where instrument is ambiguous.*—Where the language of the instrument is ambiguous, or there are omissions therein, the following rules of construction apply:

1. Where the sum payable is expressed in words and also in figures and there is a discrepancy between the two, the sum denoted by the words is the sum payable; but if the words are ambiguous or uncertain, references may be had to the figures to fix the amount;

2. Where the instrument provides for the payment of interest, without specifying the date from which interest is to run, the interest runs from the date of the instrument, and if the instrument is undated, from the issue thereof;

3. Where the instrument is not dated, it will be considered to be dated as of the time it was issued;

4. Where there is a conflict between the written and printed provisions of the instrument, the written provisions prevail;

5. Where the instrument is so ambiguous that there is doubt whether it is a bill or note, the holder may treat it as either at his election;

6. Where a signature is so placed upon the instrument that it is not clear in what capacity the person making the same intended to sign, he is to be deemed an indorser;

7. Where an instrument containing the words "I promise to pay" is signed by two or more persons, they are deemed to be jointly and severally liable thereon.

Marginal Notes.—On an instrument do not form part of it. (*Schreyer* v. *Hawkes*, 22 Ohio St. 308.)

Interest Rate.—An instrument payable with interest and the rate not specified, the legal rate is presumed. (*Hornstein* v. *Cifuno*, 86 Neb. 103.)

Written and Printed Parts.—Any part of the printed matter necessary for the construction of the written part so as to arrive at a reasonable construction of the instrument as a whole cannot be rejected. (*Miller* v. *Hannibal & St. J. R. R. Co.*, 90 N. Y. 430.) If typewritten and handwritten, the handwriting governs. (*Acme Coal Co.* v. *Northrop Nat. Bank*, 146 Pac. Rep. [Wyo.] 593.)

SIGNATURE AND LIABILITY.—

Trade or Assumed Name.—

§ 37. *Liability of person signing in trade or assumed name.*—No person is liable on the instrument whose signature does not appear thereon, except as herein otherwise expressly provided. But one who signs in a trade or assumed name will be liable to the same extent as if he had signed in his own name.

"A person may become a party to a bill or note by any mark or designation he chooses to adopt, provided it be used as a substitute for his name and he intends to be bound by it." (*De Witt* v. *Walton*, 9 N. Y. 571.)

Agent's Signature.—

§ 38. *Signature by agent; authority; how shown.*—The signature of any party may be made by a duly authorized agent. No particular form of appointment is necessary for this purpose; and the authority of the agent may be established as in other cases of agency.

§ 39. *Liability of person signing as agent, etc.*—Where the instrument contains or a person adds to his signature words indicating that he signs for or on behalf of a principal, or in a representative capacity, he is not liable on the instrument if he was duly authorized; but the mere addition of words describing him as an agent, or as filling a representative character, without disclosing his principal, does not exempt him from personal liability.

A duly authorized agent binds his principal on a negotiable instrument and he is not personally liable if he discloses his principal. A failure to disclose his principal makes him personally liable.

Descriptive Term.—A person signing an instrument by merely adding a descriptive term such as **trustee, agent,** etc., does not relieve himself from personal liability. (*Casco Nat. Bank* v. *Clarke*, 139 N. Y. 307.)

Corporate Officer.—An officer of a corporation signing a negotiable instrument of the corporation in his own name without a description of his official title or without qualifications is personally liable on the instrument. (*Brooklyn First Nat. Bank* v. *Wallis*, 150 N. Y. 455.)

Procuration.—

§ 40. *Signature by procuration; effect of.*—A signature by "procuration" operates as notice that the agent has but a limited authority to sign, and the principal is bound only in case the agent in so signing acted within the actual limits of his authority.

Such signature is not used much in the United States.

Indorsement by Infant or Corporation.—

§ 41. *Effect of indorsement by infant or corporation.*—The indorsement or assignment of the instrument by a corporation or by an infant passes the property therein, notwithstanding that from want of capacity the corporation or infant may incur no liability thereon.

Forged Signature.—

§ 42. *Forged signature; effect of.*—Where a signature is forged or made without authority of the person whose signature it purports to be, it is wholly inoperative, and no right to retain the instrument, or to give a discharge therefor, or to enforce payment thereof against any party thereto, can be acquired through or under such signature, unless the party against whom it is sought to enforce such right is precluded from setting up the forgery or want of authority.

Case under the statute. (*Seaboard Nat. Bank* v. *Bank of America*, 193 N. Y. 26.)

Consideration.—

§ 50. *Presumption of consideration.*—Every negotiable instrument is deemed *prima facie* to have been issued for a valuable consideration; and every person whose signature appears thereon to have become a party thereto for value.

Words **value received** are surplusage. Their omission does not impair negotiability. (*McLeod* v. *Hunter*, 29 Misc. [N. Y.] 559.) These words are important in non-negotiable instruments as they amount to an admission that the instrument was issued for a consideration. (*Owen* v. *Blackburn*, 161 App. Div. [N. Y.] 827.)

§ 51. *Consideration, what constitutes.*—Value is any consideration sufficient to support a simple contract. An antecedent or pre-existing debt constitutes value; and is deemed such whether the instrument is payable on demand or at a future time.

"A valuable consideration may consist of some right, interest, profit or benefit accruing to one party, or some forbearance, detriment, loss or responsibility given, suffered or undertaken by the other." (*St. Mark's Church* v. *Teed*, 120 N. Y. 583.)

Exchange of Notes.—One promissory note constitutes a good consideration for the other. (*Mehlinger* v. *Harriman*, 185 Mass. 245; *State Bank* v. *Smith*, 155 N. Y. 185.)

HOLDER FOR VALUE.—

§ 52. *What constitutes holder for value.*—Where value has at any time been given for the instrument, the holder is deemed a holder for value in respect to all parties who became such prior to that time.

§ 53. *When lien on instrument constitutes holder for value.*—Where the holder has a lien on the instrument, arising either from contract or by implication of law, he is deemed a holder for value to the extent of his lien.

§ 54. *Effect of want of consideration.*—Absence or failure of consideration is matter of defense as against any person not a holder in due course; and partial failure of consideration is a defense *pro tanto*, whether the failure is an ascertained and liquidated amount or otherwise.

Want of consideration does not affect negotiability. (*Dingman* v. *Amsink*, 77 Pa. St. 114.)

Exchange of Notes.—In an exchange of notes, one note is a consideration for the other and neither party is regarded as an accommodation party. (*State Bank* v. *Smith*, 155 N. Y. 185.)

LIABILITY OF ACCOMMODATION PARTY.—

§ 55. *Liability of accommodation party.*—An accommodation party is one who has signed the instrument as maker, drawer acceptor or indorser without receiving value therefor and for the purpose of lending his name to some other person. Such a person is liable on the instrument to a holder for value, notwithstanding such holder at the time of taking the instrument knew him to be only an accommodation party.

"A mutual exchange of notes will amount to a sufficient consideration so that the notes will not be regarded as accommodation paper." (*Rice* v. *Grange*, 131 N. Y. 149.)

Corporations.—Corporations are without power to become accommodation parties. (*Nat. Bank of Commerce* v. *Atkinson*, 55 Fed. Rep. 465; *Jacobus* v. *Jamestown Mantel Co.*, 211 N. Y. 154.;

WHAT CONSTITUTES NEGOTIATION.—

§ 60. *What constitutes negotiation.*—An instrument is negotiated when it is transferred from one person to another in such manner as to constitute the transferee the holder thereof. If payable to bearer it is negotiated by delivery; if payable to order it is negotiated by the indorsement of the holder completed by delivery.

Necessity for Delivery.—Indorsement without delivery conveys no title. (*Middleton* v. *Griffith*, 57 N. J. L. 442.)

INDORSEMENT.—

§ 61. *Indorsement; how made.*—The indorsement must be written on the instrument itself or upon a paper attached thereto. The signature of the indorser, without additional words, is a sufficient indorsement.

Place of indorsement is usually on the back of an instrument but may be anywhere on it. (*Hains* v. *Dubois*, 29 N. J. L. 259; Neg. Ins. Law, N. Y., § 36.)

Indorsement made by **rubber stamp signature,** by one having authority with intent to indorse the instrument, is a valid indorsement. (*Evans* v. *Freeman*, 142. N. C. 61.)

The holder has the burden of proving the genuiness of each indorsement necessary to support his **title.** (*Hathaway* v. *County of Delaware*, 185 N. Y. 374.)

§ 62. *Indorsement must be of entire instrument.*—The indorsement must be an indorsement of the entire instrument. An indorsement, which purports to transfer to the indorsee a part only of the amount payable, or which purports to transfer the instrument to two or more indorsees severally, does not operate as a negotiation of the instrument. But where the instrument has been paid in part, it may be indorsed as to the residue.

§ 63. *Kinds of indorsement.*—An indorsement may be either special or in blank; and it may also be either restrictive or qualified, or conditional.

§ 64. *Special indorsement; indorsement in blank.*—A special indorsement specifies the person to whom, or to whose order the instrument is to be payable; and the indorsement of such indorsee is necessary to the further negotiation of the instrument. An indorsement in blank specifies no indorsee, and an instrument so indorsed is payable to bearer, and may be negotiated by delivery.

§ 65. *Blank indorsement; how changed to special indorsement.*—The holder may convert a blank indorsement into a special indorsement by writing over the signature of the indorser in blank any contract consistent with the character of the indorsement.

§ 66. *When indorsement restrictive.*—An indorsement is restrictive, which either:

1. Prohibits the further negotiation of the instrument; or
2. Constitutes the indorsee the agent of the indorser; or
3. Vests the title in the indorsee in trust for or to the use of some other person.

But the mere absence of words implying power to negotiate does not make an indorsement restrictive.

Checks and drafts deposited with banks for collection are generally indorsed under § 66–2.

An illustration of **restrictive indorsement** under § 66–3 is: "Pay X for account of Y." Title passes to X but the indorsement is limited to the extent that it gives notice that the instrument cannot be negotiated by X for his own benefit. (*Hook* v. *Pratt*, 78 N. Y. 371.)

§ 67. *Effect of restrictive indorsement; rights of indorsee.*—A restrictive indorsement confers upon the indorsee the right:

1. To receive payment of the instrument;
2. To bring any action thereon that the indorser could bring;
3. To transfer his rights as such indorsee, where the form of the indorsement authorizes him to do so.

But all subsequent indorsees acquire only the title of the first indorsee under the restrictive indorsement.

§ 68. *Qualified indorsement.*—A qualified indorsement constitutes the indorser a mere assignor of the title to the instrument. It may be made by adding to the indorser's signature the words "without recourse" or any words of similar import. Such an indorsement does not impair the negotiable character of the instrument.

Qualified indorsement may be made by adding to the indorsement **"without recourse"** or words of similar import. (*Schmidt* v. *Pegg*, 172 Mich. 160.) A qualified or restrictive indorsement does not impair the **negotiable character** of the instrument. (*Page* v. *Ford*, 65 Ore. 450.)

§ 69. *Conditional indorsement.*—Where an indorsement is conditional, a party required to pay the instrument may disregard the condition and make payment to the indorsee or his transferee, whether the condition has been fulfilled or not. But any person to whom an instrument so indorsed is negotiated will hold the same, or the proceeds thereof subject to the rights of the person indorsing conditionally.

§ 70. *Indorsement of instrument payable to bearer.*—Where an instrument, payable

to bearer, is indorsed specially, it may nevertheless be further negotiated by delivery; but the person indorsing specially is liable as indorser to only such holders as make title through his indorsement.

§ 71. *Indorsement where payable to two or more persons.*—Where an instrument is payable to the order of two or more payees or indorsees who are not partners, all must indorse, unless the one indorsing has authority to indorse for the others.

(*Mart* v. *State Nat. Bank* 147 App. Div. [N. Y.] 250.)

§ 72. *Effect of instrument drawn or indorsed to a person as cashier.*—Where an instrument is drawn or indorsed to a person as "cashier" or other fiscal officer of a bank or corporation, it is deemed *prima facie* to be payable to the bank or corporation of which he is such officer; and may be negotiated by either the indorsement of the bank or corporation, or the indorsement of the officer.

(*Quincy Mut. Fire Ins. Co.* v. *Int. Trust Co.*, 217 Mass. 370; *Johnson* v. *Buffalo Center State Bank*, 134 Iowa 731.)

§ 73. *Indorsement where name is misspelled, et cetera.*—Where the name of a payee or indorsee is wrongly designated or misspelled, he may indorse the instrument as therein described, adding, if he think fit, his proper signature.

§ 74. *Indorsement in representative capacity.*—Where any person is under obligation to indorse in a representative capacity, he may indorse in such terms as to negative personal liability.

As to **executor or administrator,** see *Smittler* v. *Simon*, 101 N. Y. 554. As to others, see *Chelsea Exchange Bank* v. *First U. P. Church*, 89 Misc. [N. Y.] 616.

§ 75. *Time of indorsement; presumption.*—Except where an indorsement bears date after the maturity of the instrument, every negotiation is deemed *prima facie* to have been effected before the instrument was overdue.

§ 76. *Place of indorsement; presumption.*—Except where the contrary appears every indorsement is presumed *prima facie* to have been made at the place where the instrument is dated.

The importance of this section is realized when it is recalled that an indorsement not alone transfers the instrument but is also a new contract embodying the contents of the instrument. As, for instance, a note made in one state and subsequently indorsed in another becomes a contract governed by the laws of the latter state. (*Chemical Nat. Bank* v. *Kellogg*, 183 N. Y. 92; *Glidden* v. *Chamberlin*, 167 Mass. 486.)

§ 77. *Continuation of negotiable character.*—An instrument negotiable in its origin continues to be negotiable until it has been restrictively indorsed or discharged by payment or otherwise.

§ 78. *Striking out indorsement.*—The holder may at any time strike out any indorsement which is not necessary to his title. The indorser whose indorsement is struck out, and all indorsers subsequent to him, are thereby relieved from liability on the instrument.

§ 79. *Transfer without indorsement; effect of.*—Where the holder of an instrument payable to his order transfers it for value without indorsing it, the transfer vests in the transferee such title as the transferrer had therein, and the transferee acquires, in addition, the right to have the indorsement of the transferrer. But for the purpose of determining whether the transferee is a holder in due course, the negotiation takes effect as of the time when the indorsement is actually made.

§ 80. *When prior party may negotiate instrument.*—Where an instrument is negotiated back to a prior party, such party may, subject to the provisions of this act, reissue and further negotiate the same. But he is not entitled to enforce payment thereof against any intervening party to whom he was personally liable.

RIGHTS OF HOLDER.—

§ 90. *Right of holder to sue; payment.*—The holder of a negotiable instrument may sue thereon in his own name; and payment to him in due course discharges the instrument.

(*Lowell* v. *Brickford*, 201 Mass. 543; *Hathaway* v. *County of Delaware*, 185 N. Y. 374.)

HOLDER IN DUE COURSE.—

§ 91. *What constitutes a holder in due course.*—A holder in due course is a holder who has taken the instrument under the following conditions:

1. That it is complete and regular upon its face;
2. That he became the holder of it before it was overdue, and without notice that it has been previously dishonored, if such were the fact;
3. That he took it in good faith and for value;
4. That at the time it was negotiated to him he had no notice of any infirmity in the instrument or defect in the title of the person negotiating it.

As to completeness and regularity see *Hunter* v. *Allen*, 127 App. Div. [N.Y.] 572.

Negotiable instruments acquired **after maturity** become subject to the same defenses as if non-negotiable. (*Cole* v. *Stearns*, 162 N. Y. 637.)

A **bank discounting paper** and merely placing amount to the credit of customer does not become a holder in due course. (*Citizens State Bank* v. *Cowles*, 180 N. Y. 346.) But if the sum so credited is drawn on and checked out, the bank becomes a holder in due course. (*Merchants Bank* v. *Santa Maria Sugar Co.*, 162 App. Div. [N. Y.] 248.)

A **gift** of a negotiable instrument does not make the donee a holder in due course. (*Greer* v. *Orchard*, 175 Mo. App. 494.)

§ 92. *When person not deemed holder in due course.*—Where an instrument payable on demand is negotiated an unreasonable length of time after its issue, the holder is not deemed a holder in due course.

What constitutes a **reasonable time** depends on the facts in each case. (*Commercial Nat. Bank* v. *Zimmermann*, 185 N. Y. 310.)

§ 93. *Notice before full amount paid.*—Where the transferee receives notice of any infirmity in the instrument or defect in the title of the person negotiating the same before he has paid the full amount agreed to be paid therefor, he will be deemed a holder in due course only to the extent of the amount theretofore paid by him.

§ 94. *When title defective.*—The title of a person who negotiates an instrument is defective within the meaning of this act when he obtained the instrument, or any signature thereto, by fraud, duress, or force and fear, or other unlawful means, or for an illegal consideration, or when he negotiates it in breach of faith, or under such circumstances as amount to a fraud.

§ 95. *What constitutes notice of defect.*—To constitute notice of an infirmity in the instrument or defect in the title of the person negotiating the same, the person to whom it is negotiated must have had actual knowledge of the infirmity or defect, or knowledge of such facts that his action in taking the instrument amounted to bad faith.

For **actual notice,** see cases: *Swift* v. *Smith*, 102 U. S. 442; *Jarvis* v. *Manhattan Beach Co.*, 148 N. Y. 652; *Interboro Brewing Co.* v. *Doyle*, 165 App. Div. [N. Y.] 646.

Inquiry.—The transferee is not required to make inquiry. (*Cheever* v. *Pittsburgh etc. R. Co.*, 150 N. Y. 59.)

A holder's knowledge of the poor **financial condition of the maker** is not sufficient to put him on notice of a defect, as he has a right to rely on the indorsements. (*Baruch* v. *Buckley*, 167 App. Div. [N. Y.] 113.)

A **purchase at discount,** even though it is large, is not sufficient to deprive the holder of rights of a holder in due course. (*Ham* v. *Merrett*, 150 Ky. 11.) If the discount is very large and there are other factors, they may be considered together to determine if he became a holder for value in good faith. (*Sabine* v. *Paine*, 166 App. Div. [N. Y.] 10.)

Negotiable instrument issued **by a corporate officer** for his personal benefit or use is *prima facie* unlawful and unless authorized the person taking such paper does so at his peril. (*Wilson* v. *Metropolitan Ry. Co.*, 120 N. Y. 145.)

Duress.—Negotiable instrument issued under **duress** is void. (*Magoon* v. *Reber*, 76 Wis. 392.)

RIGHTS OF HOLDER IN DUE COURSE.—

§ 96. *Rights of holder in due course.*—A holder in due course holds the instrument free from any defect of title of prior parties and free from defenses available to prior parties among themselves, and may enforce payment of the instrument for the full amount thereof against all parties liable thereon.

Stolen Securities.—An incomplete instrument stolen before negotiated is not valid in the hands of a holder. (*Limmick* v. *Nutting*, 140 App. Div. [N. Y.] 265.) Where, however, the instrument has been negotiated, an innocent purchaser for value becomes a holder in due course even if his title is derived from one who has stolen the instrument after issue. (*Mass. Nat. Bank* v. *Snow*, 187 Mass. 160.) (See note under § 34.) Burden of proof is on the holder that he obtained the instrument from a holder in due course. (*Lawyers Title etc. Co.* v. *Jones*, 113 App. Div. [N. Y.] 105.)

Instruments Issued in Violation of Law.—The decisions of the courts interpreting this section are in conflict. The predominating rule seems to hold that a negotiable instrument issued in violation of some statute and void between original parties is, however, good and enforcible against the maker if in the hands of a holder in due course. (*Wirt* v. *Stubblefield*, 17 App. Case [D. C.] 283.)

Probably the weight of authority is to construe this section to meet the requirements of commerce as expressed by Judge Van: "The business of the country is done so largely by means of commercial paper that the interests of commerce require that a promissory note, fair on its face, should be as negotiable as a government bond. Every restriction upon the circulation of negotiable papers is an injury to the state, for it tends to derange trade and hinders the transaction of business." (*Chemical Nat. Bank* v. *Kellogg*, 183 N. Y. 92.) Courts of other states hold that a negotiable instrument issued in violation of law is invalid against the maker even in the hands of innocent purchasers on the ground of public policy. (*Alexander* v. *Hazelrigg* 123 Ky. 677.)

Instruments Purchased Under Par.—"We are of opinion that a purchaser of a negotiable security before maturity, in a case where he is not personally chargeable with fraud, is entitled to recover its full amount against its maker, though he may have paid less than par value whatever may have been the original infirmity." (*Cromwell* v. *County of Sac.*, 96 U. S. 51.)

When Subject to Original Defenses.—

§ 97. *When subject to original defenses.*—In the hands of any holder other than a holder in due course, a negotiable instrument is subject to the same defenses as if it were non-negotiable. But a holder who derives his title through a holder in due course; and who is not himself a party to any fraud or illegality affecting the instrument, has all the rights of such former holder in respect of all parties prior to the latter.

Who is Deemed Holder in Due Course.—

§ 98. *Who deemed holder in due course.*—Every holder is deemed *prima facie* to be a holder in due course; but when it is shown that the title of any person who has negotiated the instrument was defective, the burden is on the holder to prove that he or some person under whom he claims acquired the title as a holder in due course. But

the last-mentioned rule does not apply in favor of a party who became bound on the instrument prior to the acquisition of such defective title.

LIABILITY OF MAKER.—

§ 110. *Liability of maker.*—The maker of a negotiable instrument by making it engages that he will pay it according to its tenor; and admits the existence of the payee and his then capacity to indorse.

The maker is primarily liable even if he signed only for **accommodation.** (*Richards* v. *Market Exchange Bank*, 81 Ohio State 348.)

Where an indorser deposited security for the payment of the instrument, this is not a defense for the maker. (*People's Nat. Bank* v. *Rice*, 149 App. Div. [N. Y.] 18.)

If an assumed or trade name is used for an existing payee, the maker is estopped from setting up that the payee is fictitious. (*Jones* v. *Home Furn. Co.*, 9 App. Div. [N. Y.] 103.)

LIABILITY OF DRAWER.—

§ 111. *Liability of drawer.*—The drawer by drawing the instrument admits the existence of the payee and his then capacity to indorse; and engages that on due presentment the instrument will be accepted and paid, or both, according to its tenor, and that if it be dishonored and the necessary proceedings on dishonor be duly taken, he will pay the amount thereof to the holder, or to any subsequent indorser who may be compelled to pay it. But the drawer may insert in the instrument an express stipulation negativing or limiting his own liability to the holder.

LIABILITY OF ACCEPTOR.—

§ 112. *Liability of acceptor.*—The acceptor by accepting the instrument engages that he will pay it according to the tenor of his acceptance; and admits:

1. The existence of the drawer, the genuineness of his signature, and his capacity and authority to draw the instrument; and
2. The existence of the payee and his then capacity to indorse.

The acceptor is estopped from setting up **incapacity of drawer** where the instrument is drawn by an infant, married woman, or a corporation without such power. (*Cowton* v. *Wickersham*, 54 Pa. St. 302; *Jones* v. *Darch*, 4 Price 300.)

Drawee cannot hold the drawer where acceptance was for **accommodation** until he (the drawee) has paid the instrument. (*Christian* v. *Keen*, 80 Va. 369.)

WHO IS DEEMED INDORSER?—

§ 113. *When person deemed indorser.*—A person placing his signature upon an instrument otherwise than as maker, drawer or acceptor is deemed to be an indorser, unless he clearly indicates by appropriate words his intention to be bound in some other capacity.

Intention to be bound otherwise must be clear and distinct by appropriate language and cannot be inferred by equivocal language or conduct. (*McDonald* v. *Luckenbach*, 170 Fed. Rep. 434.)

Individual liability is not incurred by an **officer** indorsing as an officer of the corporation. (*McDonald* v. *Luckenbach*, 170 Fed. Rep. 434.)

The rule is that a **partner** indorsing in his individual capacity, different than or in addition to his partnership indorsement, incurs a double liability from the two separate and distinct indorsements made by him. (*Fourth Nat. Bank* v. *Mead*, 216 Mass. 521.)

IRREGULAR INDORSER.—

§ 114. *Liability of irregular indorser.*—Where a person, not otherwise a party to an instrument, places thereon his signature in blank before delivery, he is liable as indorser in accordance with the following rules:

1. If the instrument is payable to the order of a third person, he is liable to the payee and to all subsequent parties.

2. If the instrument is payable to the order of the maker or drawer, or is payable to bearer, he is liable to all parties subsequent to the maker or drawer.

3. If he signs for the accommodations of the payee he is liable to all parties subsequent to the payee.

WARRANTY WHERE NEGOTIATION BY DELIVERY.—

§ 115. *Warranty where negotiation by delivery, et cetera.*—Every person negotiating an instrument by delivery or by a qualified indorsement, warrants:

1. That the instrument is genuine and in all respects what it purports to be;

2. That he has a good title to it;

3. That all prior parties had capacity to contract;

4. That he has no knowledge of any fact which would impair the validity of the instrument or render it valueless.

But when the negotiation is by delivery only, the warranty extends in favor of no holder other than the immediate transferee. The provisions of subdivision three of this section do not apply to persons negotiating public or corporate securities, other than bills and notes.

Implied and Express Warranties.—"It has long been the settled law of this State, and now been made law by statute, that every person negotiating a negotiable instrument by delivery or by qualified indorsement, warrants that the instrument is genuine and in all respects what it purports to be." (*Gaboy* v. *Doane*, 66 App. Div. [N. Y.] 507.) The warranties referred to in the statute are implied warranties. The parties may draw such express warranties as they may choose. (*Bell* v. *Dagg*, 60 N. Y. 528.)

Knowledge of Defect.—If an indorser knows an instrument is void he will be liable to the purchaser. (*Littauer* v. *Goldman*, 72 N. Y. 506.)

GENERAL INDORSER.—

§ 116. *Liability of general indorser.*—Every indorser who indorses without qualification warrants to all subsequent holders in due course:

1. The matter and things mentioned in subdivisions one, two and three of the next preceding section; and

2. That the instrument is at the time of his indorsement valid and subsisting.

And, in addition, he engages that on due presentment, it shall be accepted or paid, or both, as the case may be, according to its tenor, and that if it be dishonored, and the necessary proceedings on dishonor be duly taken, he will pay the amount thereof to the holder, or to any subsequent indorser who may be compelled to pay it.

The warranties are in favor of subsequent holders only.

Indorsement guaranteed on back of an instrument guarantees the entire instrument and all indorsements except the signature of the drawer. (*N. Y. Produce Ex. Bank* v. *Twelfth Ward Bank*, 135 App. Div. [N. Y.] 52.)

It is beyond the power of an **executor** to bind the estate of which he is executor by a contract of indorsement. (*Schmittler* v. *Simon*, 101 N. Y. 554.)

LIABILITY OF INDORSERS.—

§ 117. *Liability of indorser where paper negotiable by delivery.*—Where a person places his indorsement on an instrument negotiable by delivery he incurs all the liabilities of an indorser.

§ 118. *Order in which indorsers are liable.*—As respects one another, indorsers are liable *prima facie* in the order in which they indorse; but evidence is admissible to show that as between or among themselves they have agreed otherwise. Joint payees or joint indorsees who indorse are deemed to indorse jointly and severally.

The rule applies to **accommodation indorsers** as well as others.

LIABILITY OF AGENT.—

§ 119. *Liability of agent or broker.*—Where a broker or other agent negotiates an instrument without indorsement, he incurs all the liabilities prescribed by section one hundred and fifteen of this act, unless he discloses the name of his principal, and the fact that he is acting only as agent.

PRESENTMENT FOR PAYMENT.—

§ 130. *Effect of want of demand on principal debtor.*—Presentment for payment is not necessary in order to charge the person primarily liable on the instrument; but if the instrument is, by its terms, payable at a special place, and he is able and willing to pay it there at maturity and has funds there available for that purpose, such ability and willingness are equivalent to a tender of payment upon his part. But except as herein otherwise provided, presentment for payment is necessary in order to charge the drawer and indorsers.

The rule in the United States is that although the instrument is payable at a particular place, it is not necessary, to recover from the maker, to prove presentment or demand for payment at such a place. However, failure to present at that place relieves the party primarily liable from costs or damages if he was ready, able, and willing to make payment at that place.

PRESENTMENT WHERE NOT PAYABLE ON DEMAND.—

§ 131. *Presentment where instrument is not payable on demand.*—Where the instrument is not payable on demand, presentment must be made on the day it falls due. Where it is payable on demand, presentment must be made within a reasonable time after its issue, except that in case of a bill of exchange, presentment for payment will be sufficient if made within a reasonable time after the last negotiation thereof.

Reasonable time depends on circumstances in each case. No definite rule laid down by the courts. Usage of trade seems to govern. As banks generally make paper payable within 4 months, this is deemed a reasonable time to present paper payable on demand. (*Frazee* v. *Phoenix Nat. Bank*, 161 Ky. 175.) In Massachusetts, in the absence of usage of trade a reasonable time to present demand instruments in order to hold indorsers is 60 days. (*Merritt* v. *Jackson*, 181 Mass. 67.)

WHAT CONSTITUTES SUFFICIENT PRESENTMENT.—

§ 132. *What constitutes a sufficient presentment.*—Presentment for payment, to be sufficient, must be made:

1. By the holder, or by some person authorized to receive payment on his behalf;
2. At a reasonable hour on a business day;
3. At a proper place as herein defined;
4. To the person primarily liable on the instrument, or if he is absent or inaccessible, to any person found at the place where the presentment is made.

Time of Day.—Instruments payable at a bank must be presented within banking hours; at a place of business within usual business hours; at a residence before the usual hours of rest, as late as 9 P.M. having been held a reasonable hour. (*Farnsworth* v. *Allen*, 4 Gray 453.)

PLACE OF PRESENTMENT.—

§ 133. *Place of presentment.*—Presentment for payment is made at the proper place:

1. Where a place of payment is specified in the instrument and it is there presented;
2. Where no place of payment is specified, but the address of the person to make payment is given in the instrument and it is there presented;
3. Where no place of payment is specified and no address is given and the instrument is presented at the usual place of business or residence of the person to make payment.
4. In any other case if presented to the person to make payment wherever he can be found, or if presented at his last known place of business or residence.

Where No Place Specified.—The maker's usual place of business is sufficient even if no one is there to answer, as the maker is bound to have a person there to answer and pay his note if presented. (*Baumgardner* v. *Rieves*, 35 Pa. St. 250.)

INSTRUMENT TO BE EXHIBITED.—

§ 134. *Instrument must be exhibited.*—The instrument must be exhibited to the person from whom payment is demanded, and when it is paid must be delivered up to the party paying it.

Demand over telephone is not sufficient as it does not comply with the statute. (*Gilpin* v. *Savage*, 201 N. Y. 167.)

Request for payment in an informal manner not intended as presentment is insufficient. (*State of N. Y. Nat. Bank* v. *Kennedy*, 145 App. Div. [N. Y.] 669.)

PRESENTMENT WHEN PAYABLE AT BANK.—

§ 135. *Presentment where instrument payable at bank.*—Where the instrument is payable at a bank, presentment for payment must be made during banking hours, unless the person to make payment has no funds there to meet it at any time during the day, in which case presentment at any hour before the bank is closed on that day is sufficient.

Where bank is closed and in hands of receiver, demand on receiver personally is not necessary. Instruments, however, may be presented at the bank (*Schlesinger* v. *Schultz*, 110 App. Div. [N. Y.] 356) or as set forth in § 133.

PRESENTMENT WHERE PRINCIPAL DEBTOR IS DEAD.—

§ 136. *Presentment where principal debtor is dead.*—Where the person primarily liable on the instrument is dead, and no place of payment is specified, presentment for payment must be made to his personal representative, if such there be, and if with the exercise of reasonable diligence, he can be found.

As to **reasonable diligence** see *Reed* v. *Spear*, 107 App. Div. [N. Y.] 144.

Although the holder is relieved from making presentment under this section, it does not relieve him from giving notice of dishonor to the **indorsers** to hold them. (*Reed* v. *Spear*, 107 App. Div. [N. Y.] 144.)

PRESENTMENT TO PARTNERS OR JOINT DEBTORS.—

§ 137. *Presentment to persons liable as partners.*—Where the persons primarily liable on the instrument are liable as partners, and no place of payment is specified presentment for payment may be made to any one of them, even though there has been a dissolution of the firm.

§ 138. *Presentment to joint debtors.*—Where there are several persons not partners primarily liable on the instrument, and no place of payment is specified, presentment must be made to them all.

WHEN PRESENTMENT NOT REQUIRED TO CHARGE DRAWER.—

§ 139. *When presentment not required to charge the drawer.*—Presentment for payment is not required in order to charge the drawer where he has no right to expect or require that the drawee or acceptor will pay the instrument.

Although the drawer has no funds in the hands of the drawee, presentment is not dispensed with. (*Life Ins. Co.* v. *Pendleton*, 112 U. S. 708.)

WHEN PRESENTMENT NOT REQUIRED TO CHARGE INDORSER.—

§ 140. *When presentment not required to charge the indorser.*—Presentment for payment is not required in order to charge an indorser where the instrument was made or accepted for his accommodation, and he has no reason to expect that the instrument will be paid if presented.

DELAY IN PRESENTMENT.—

§ 141. *When delay in making presentment is excused.*—Delay in making presentment for payment is excused when the delay is caused by circumstances beyond the control of the holder and not imputable to his default, misconduct or negligence. When the cause of delay ceases to operate presentment must be made with reasonable diligence.

Sickness is not an excuse for failure to present a note for payment at the proper time, unless the illness is so severe that the holder cannot direct another to present it. In that case presentment must be made as soon as the disability is removed. (*Wilson* v. *Senier*, 14 Wis. 380.)

WHEN PRESENTMENT IS DISPENSED WITH.—

§ 142. *When presentment may be dispensed with.*—Presentment for payment is dispensed with:

1. Where, after the exercise of reasonable diligence presentment as required by this act cannot be made;
2. Where the drawee is a fictitious person;
3. By waiver of presentment express or implied.

Insolvency of maker or acceptor does not dispense with the necessity for presentment. (*J. W. O'Bannan Co.* v. *Curran*, 129 App. Div. [N. Y.] 90.)

DISHONOR BY NON-PAYMENT.—

§ 143. *When instrument dishonored by non-payment.*—The instrument is dishonored by non-payment when:

1. It is duly presented for payment and payment is refused or cannot be obtained; or
2. Presentment is excused and the instrument is overdue and unpaid.

§ 144. *Liability of person secondarily liable, when instrument dishonored.*—Subject to the provisions of this act, when the instrument is dishonored by non-payment, an immediate right of recourse to all parties secondarily liable thereon, accrues to the holder.

TIME OF MATURITY.—

§ 145. *Time of maturity.*—Every negotiable instrument is payable at the time fixed therein without grace. When the day of maturity falls upon Sunday or a holiday, the instrument is payable on the next succeeding business day. Instruments falling due or becoming payable on Saturday are to be presented for payment on the next succeeding business day, except that instruments payable on demand may, at the option of the holder, be presented for payment before twelve o'clock noon on Saturday when that entire day is not a holiday.

§ 146. *Time; how computed.*—Where the instrument is payable at a fixed period after date, after sight or after the happening of a specified event, the time of payment is determined by excluding the day from which the time is to begin to run, and by including the date of payment.

PAYABLE AT BANK.—

§ 147. *Rule where instrument payable at bank.*—Where the instrument is made payable at a bank it is equivalent to an order to the bank to pay the same for the account of the principal debtor thereon.

PAYABLE IN DUE COURSE.—

§ 148. *What constitutes payment in due course.*—Payment is made in due course when it is made at or after the maturity of the instrument to the holder thereof in good faith and without notice that his title is defective.

Possession of the instrument is *prima facie* authority to demand payment. The maker or drawer has a duty to demand the production of the instrument before paying it. (*Loizeaux* v. *Fremder*, 123 Wis. 193.)

NOTICE OF DISHONOR.—

§ 160. *To whom notice of dishonor must be given.*—Except as herein otherwise provided, when a negotiable instrument has been dishonored by non-acceptance or non-payment notice of dishonor must be given to the drawer and to each indorser, and any drawer or indorser to whom such notice is not given is discharged.

To hold an **accommodation indorser** he must be given notice of dishonor the same as any other indorser. (*Perry* v. *Taylor*, 148 N. C. 362.)

Where a note given to a **bank** for collection is dishonored, it is the duty of the bank to give notice to its customer. (*Shea* v. *Vahey*, 215 Mass. 80.)

Guarantors do not come under the rule requiring notice. (*Brown* v. *Curtiss*, 2 N. Y. 225.)

§ 161. *By whom given.*—The notice may be given by or on behalf of the holder, or by or on behalf of any party to the instrument who might be compelled to pay it to the holder, and who, upon taking it up, would have a right to reimbursement from the party to whom the notice is given.

"A notice by a **stranger** to the instrument is not sufficient." (*Lawrence* v. *Miller*, 16 N. Y. 235.)

§ 162. *Notice given by agent.*—Notice of dishonor may be given by an agent either in his own name or in the name of any party entitled to give notice, whether that party be his principal or not.

Banks having instruments for collection act as agents and have authority to receive and give notice on behalf of the holders of the instruments. (*Kelly* v. *Theiss*, 78 N. Y. S. 1050; *West River Bank* v. *Taylor*, 34 N. Y. 128.)

A **notary** who is an agent for the owner of a negotiable instrument may give notice even though acting in his official capacity. (*Lawrence* v. *Miller*, 16 N. Y. 235.)

§ 163. *Effect of notice given on behalf of holder.*—Where notice is given by or on behalf of the holder, it enures for the benefit of all subsequent holders and all prior parties who have a right of recourse against the party to whom it is given.

A **holder** need not give notice to anyone but his immediate indorser. (*West River Bank* v. *Taylor*, 34 N. Y. 128.)

§ 164. *Effect where notice is given by party entitled thereto.*— Where notice is given by or on behalf of a party entitled to give notice, it enures for the benefit of the holder and all parties subsequent to the party to whom notice is given.

§ 165. *When agent may give notice.*—Where the instrument has been dishonored in the hands of an agent he may either himself give notice to the parties liable thereon, or he may give notice to his principal. If he give notice to his principal he must do so within the same time as if he were the holder, and the principal, upon the receipt of such notice, has himself the same time for giving notice as if the agent had been an independent holder.

Undue delay by an agent in giving notice to his principal discharges prior indorsers. (*Rosson* v. *Carroll*, 90 Tenn. 90.)

A **bank** receiving an instrument for collection fulfils its duty to the depositor by giving proper notice of dishonor in time to enable its customer to give notice to prior indorsers. (*Brill* v. *Jefferson Bank*, 159 App. Div. [N. Y.] 461.)

§ 166. *When notice sufficient.*—A written notice need not be signed, and an insufficient written notice may be supplemented and validated by verbal communication. A misdescription of the instrument does not vitiate the notice unless the party to whom the notice is given is in fact misled thereby.

§ 167. *Form of notice.*—The notice may be in writing or merely oral, and may be given in any terms which sufficiently identify the instrument, and indicate that it has been dishonored by non-acceptance or non-payment. It may in all cases be given by delivering it personally or through the mails.

Sufficient description generally is name of maker, date, amount, when and where payable.

Notice over telephone is sufficient. (*Am. Nat. Bank* v. *Nat. Fertilizer Co.*, 125 Tenn. 328.)

§ 168. *To whom notice may be given.*—Notice of dishonor may be given either to the party himself or to his agent in that behalf.

§ 169. *Notice where party is dead.*—When any party is dead, and his death is known to the party giving notice, the notice must be given to a personal representative, if there be one, and if with reasonable diligence he can be found. If there be no personal representative, notice may be sent to the last residence or last place of business of the deceased.

§ 170. *Notice to partners.*—Where the parties to be notified are partners, notice to any one partner is notice to the firm, even though there has been a dissolution.

§ 171. *Notice to persons jointly liable.*—Notice to joint parties who are not partners must be given to each of them, unless one of them has authority to receive such notice for the others.

§ 172. *Notice to bankrupt.*—Where a party has been adjudged a bankrupt or an insolvent, or has made an assignment for the benefit of creditors, notice may be given either to the party himself or to his trustee or assignee.

§ 173. *Time within which notice must be given.*—Notice may be given as soon as the instrument is dishonored; and unless delay is excused as hereinafter provided, must be given within the times fixed by this act.

§ 174. *Where parties reside in same place.*—Where the person giving and the person to receive notice reside in the same place, notice must be given within the following times:

1. If given at the place of business of the person to receive notice, it must be given before the close of business hours on the day following;

2. If given at his residence, it must be given before the usual hours of rest on the day following;

3. If sent by mail, it must be deposited in the post-office in time to reach him in usual course on the day following.

§ 175. *Where parties reside in different places.*—Where the person giving and the person to receive notice reside in different places, the notice must be given within the following times:

1. If sent by mail, it must be deposited in the post-office in time to go by mail the day following the day of dishonor, or if there be no mail at a convenient hour on that day, by the next mail thereafter.

2. If given otherwise than through the post-office, then within the time that notice would have been received in due course of mail, if it had been deposited in the post-office within the time specified in the last subdivision.

Notice is not good where there is delay due to **insufficient postage.** (*First Nat. Bank* v. *Miller*, 139 Wis. 126.)

§ 176. *When sender deemed to have given due notice.*—Where notice of dishonor is duly addressed and deposited in the post-office, the sender is deemed to have given due notice, notwithstanding any miscarriage in the mails.

§ 177. *Deposit in post-office; what constitutes.*—Notice is deemed to have been deposited in the post-office when deposited in any branch post-office or in any letter-box under the control of the Post-Office Department.

§ 178. *Notice to subsequent party; time of.*—Where a party receives notice of dishonor, he has, after the receipt of such notice, the same time for giving notice to antecedent parties that the holder has after the dishonor.

§ 179. *Where notice must be sent.*—Where a party has added an address to his signature, notice of dishonor must be sent to that address; but if he has not given such address, then the notice must be sent as follows:

1. Either to the post-office nearest to his place of residence, or to the post-office where he is accustomed to receive his letters; or

2. If he live in one place, and have his place of business in another, notice may be sent to either place; or

3. If he is sojourning in another place, notice may be sent to the place where he is so sojourning.

But where the notice is actually received by the party within the time specified in this act, it will be sufficient, though not sent in accordance with the requirements of this section.

§ 180. *Waiver of notice.*—Notice of dishonor may be waived, either before the time of giving notice has arrived or after the omission to give due notice, and the waiver may be express or implied.

§ 181. *Whom affected by waiver.*—Where the waiver is embodied in the instrument itself, it is binding upon all parties; but where it is written above the signature of an indorser, it binds him only.

§ 182. *Waiver of protest.*—A waiver of protest, whether in the case of a foreign bill of exchange or other negotiable instrument, is deemed to be a waiver not only of a formal protest, but also of presentment and notice of dishonor.

§ 183. *When notice is dispensed with.*—Notice of dishonor is dispensed with when, after the exercise of reasonable diligence, it cannot be given to or does not reach the parties sought to be charged.

Reasonable diligence is all that is required under the law, which does not demand unusual effort to give notice of dishonor. (*Bank of Port Jefferson* v. *Darling*, 91 Hun 236.) Reliance on directory only is not sufficient to constitute due diligence. (*Bacon* v. *Harms*, 137 N. Y. 379.) Where a holder does not know or cannot find the address of the maker, it is his duty to inquire of the other parties to an instrument. (*University Press* v. *Williams*, 48 App. Div. [N. Y.] 190.)

§ 184. *Delay in giving notice; how excused.*—Delay in giving notice of dishonor is excused when the delay is caused by circumstances beyond the control of the holder and not imputable to his default, misconduct or negligence. When the cause of delay ceases to operate, notice must be given with reasonable diligence.

§ 185. *When notice need not be given to drawer.*—Notice of dishonor is not required to be given to the drawer in either of the following cases:

1. Where the drawer and drawee are the same person;

2. Where the drawee is a fictitious person or a person not having capacity to contract;

3. Where the drawer is the person to whom the instrument is presented for payment;

4. Where the drawer has no right to expect or require that the drawee or acceptor will honor the instrument;

5. Where the drawer has countermanded payment.

§ 186. *When notice need not be given to indorser.*—Notice of dishonor is not required to be given to an indorser in either of the following cases:

1. Where the drawee is a fictitious person or a person not having capacity to contract, and the indorser was aware of the fact at the time he indorsed the instrument;

2. Where the indorser is the person to whom the instrument is presented for payment;

3. Where the instrument was made or accepted for his accommodation.

Where the Instrument Is Made for the Indorser's Benefit.—An indorser obtaining the note of another which he had discounted for his benefit at the bank, at which time he makes a distinct promise to pay the note at maturity, is not entitled to notice of non-payment as his liability is absolute and not secondary. (*Sieger* v. *Second Nat. Bank*, 132 Pa. St. 307.)

§ 187. *Notice of non-payment where acceptance refused.*—Where due notice of dishonor by non-acceptance has been given, notice of a subsequent dishonor by nonpayment is not necessary, unless in the meantime the instrument has been accepted.

§ 188. *Effect of omission to give notice of non-acceptance.*—An omission to give notice of dishonor by non-acceptance does not prejudice the rights of a holder in due course subsequent to the omission.

PROTEST.—

§ 189. *When protest need not be made; when must be made.*—Where any negotiable instrument has been dishonored it may be protested for non-acceptance or non-payment, as the case may be; but protest is not required, except in the case of foreign bills of exchange.

Protest—When Desirable Although not Necessary.—Although protest is not legally required in the case of non-payment of inland bills of exchange, it is desirable to have a certificate of a notary setting forth presentation and demand for payment where it is necessary to bring legal action. Such certificates are accepted in most states as *prima facie* evidence of such presentation, demand for payment, and notice to indorsers in case of dishonor. Without such certificates it is sometimes difficult to prove these facts in court. (See *Scott* v. *Brown*, 240 Pa. St. 328.)

DISCHARGE.—

§ 200. *Instrument; how discharged.*—A negotiable instrument is discharged:

1. By payment in due course by or on behalf of the principal debtor;
2. By payment in due course by the party accommodated, where the instrument is made or accepted for accommodation;
3. By the intentional cancellation thereof by the holder;
4. By any other act which will discharge a simple contract for the payment of money;
5. When the principal debtor becomes the holder of the instrument at or after maturity in his own right.

Proof of Payment.—A person admitting the making of an instrument has the burden of proof of showing that payment was made and that the instrument is discharged as to him. (*Swan* v. *Caravan*, 168 N. C. 472.)

Accommodation Paper.—An accommodation instrument made for the benefit of one of several makers, which is paid by one of them, is discharged as to all of the other makers. (*Comstock* v. *Buckley*, 141 Wis. 228.)

DISCHARGE OF PERSONS SECONDARILY LIABLE:—

§ 201. *When persons secondarily liable on, discharged.*—A person secondarily liable on the instrument is discharged:

1. By any act which discharges the instrument;
2. By the intentional cancellation of his signature by the holder;
3. By the discharge of a prior party;
4. By a valid tender of payment made by a prior party;
5. By a release of the principal debtor, unless the holder's right of recourse against the party secondarily liable is expressly reserved;
6. By any agreement binding upon the holder to extend the time of payment or to postpone the holder's right to enforce the instrument, unless the right of recourse against such party is expressly reserved.

Discharge of Prior Party.—Any act which discharges a prior indorser discharges all subsequent indorsers for the reason that on making payment each indorser had recourse to the one ahead of him, but through such discharge the subsequent indorsers are precluded from such rights. (*Spies* v. *Nat. City Bank*, 174 N. Y. 222.)

Security Given by Prior Party.—The giving of security by the maker or prior indorser for payment is not payment nor does it discharge subsequent indorsers. (*First Nat. Bank* v. *Peltz*, 176 Pa. St. 513.)

Extension of Time.—There must be an enforcible agreement binding on the holder to discharge the indorsers. A mere acquiescence, letting the instrument stand, will not discharge the maker or indorsers. (*Smith* v. *Erwin*, 7 N. Y. 466.)

§ 202. *Right of party who discharges instrument.*—Where the instrument is paid by a party secondarily liable thereon, it is not discharged; but the party so paying it is remitted to his former rights as regards all prior parties, and he may strike out his own and all subsequent indorsements, and again negotiate the instrument, except:

1. Where it is payable to the order of a third person, and has been paid by the drawer; and

2. Where it was made or accepted for accommodation, and has been paid by the party accommodated.

§ 203. *Renunciation by holder.*—The holder may expressly renounce his rights against any party to the instrument, before, at or after its maturity. An absolute and unconditional renunciation of his rights against the principal debtor made at or after the maturity of the instrument, discharges the instrument. But a renunciation does not affect the rights of a holder in due course without notice. A renunciation must be in writing, unless the instrument is delivered up to the person primarily liable thereon.

§ 204. *Cancellation; unintentional; burden of proof.*—A cancellation made unintentionally, or under a mistake, or without the authority of the holder, is inoperative; but where an instrument or any signature thereon appears to have been canceled the burden of proof lies on the party who alleges that the cancellation was made unintentionally, or under a mistake or without authority.

ALTERATION.—

§ 205. *Alteration of instrument; effect of.*—Where a negotiable instrument is materially altered without the assent of all parties liable thereon, it is avoided, except as against a party who has himself made, authorized or assented to the alteration and subsequent indorsers. But when an instrument has been materially altered and is in the hands of a holder in due course, not a party to the alteration, he may enforce payment thereof according to its original tenor.

§ 206. *What constitutes a material alteration.*—Any alteration which changes:

1. The date;
2. The sum payable, either for principal or interest;
3. The time or place of payment;
4. The number or the relations of the parties;
5. The medium or currency in which payment is to be made;

Or which adds a place of payment where no place of payment is specified, or any other change or addition which alters the effect of the instrument in any respect, is a material alteration.

Amount of Principal.—Although the amount may be reduced from $500 to $400, such alteration is material. (*Hewins* v. *Cargill*, 67 Me. 554.)

Interest.—Adding the words "with interest at six per cent" is a material alteration. (*Broadway Nat. Bank* v. *Hefferman*, 220 Mass. 247.)

Medium of Payment.—Adding the words "in gold coin" is a material alteration. (*Wills* v. *Wilson*, 3 Ore. 308.)

"To Order" Changed to "To Bearer."—Striking out the words "to order" and inserting "to bearer" on an instrument made payable to order is a material alteration. (*Builder's Lime & Cement Co.* v. *Weiner*, 151 N. W. Rep. [Iowa] 100.)

BILLS OF EXCHANGE.—

§ 210. *Bill of exchange defined.*—A bill of exchange is an unconditional order in writing addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer.

§ 211. *Bill not an assignment of funds in hands of drawee.*—A bill of itself does not operate as an assignment of the funds in the hands of the drawee available for the payment thereof, and the drawee is not liable on the bill unless and until he accepts the same.

§ 212. *Bill addressed to more than one drawee.*—A bill may be addressed to two or more drawees jointly, whether they are partners or not; but not to two or more drawees in the alternative or in succession.

§ 213. *Inland and foreign bills of exchange.*—An inland bill of exchange is a bill which is, or on its face purports to be, both drawn and payable within the State. Any other bill is a foreign bill. Unless the contrary appears on the face of the bill, the holder may treat it as an inland bill.

Foreign Bills.—A check drawn in one state and payable at a bank in another state is a foreign bill of exchange. (*Mankey* v. *Hoyt*, 27 S. D. 561.)

§ 214. *When bill may be treated as promissory note.*—Where in a bill the drawer and drawee are the same person, or where the drawee is a fictitious person, or a person not having capacity to contract, the holder may treat the instrument, at his option, either as a bill of exchange or a promissory note.

§ 215. *Referee in case of need.*—The drawer of a bill and any indorser may insert thereon the name of a person to whom the holder may resort in case of need, that is to say, in case the bill is dishonored by non-acceptance or non-payment. Such person is called the referee in case of need. It is in the option of the holder to resort to the referee in case of need or not, as he may see fit.

ACCEPTANCE.—

§ 220. *Acceptance; how made, et cetera.*—The acceptance of a bill is the signification by the drawee of his assent to the order of the drawer. The acceptance must be in writing and signed by the drawee. It must not express that the drawee will perform his promise by any other means than the payment of money.

Usual Method.—The usual method of accepting a bill is to write the word "Accepted" subscribed by the drawee's signature on the face of the bill.

Acceptance Must Be in Writing.—Oral acceptance although good at common law is not good under the statute which prescribes that acceptance must be in writing.

Acceptance by Telegraph.—Held to be sufficient acceptance under the statute. (*Oil Well Supply Co.* v. *MacMurphy*, 119 Minn. 500; *Johnson* v. *Clark*, 39 N. Y. 216.)

§ 221. *Holder entitled to acceptance on face of bill.*—The holder of a bill presenting the same for acceptance may require that the acceptance be written on the bill, and if such request is refused, may treat the bill as dishonored.

§ 222. *Acceptance by separate instrument.*—Where an acceptance is written on a paper other than the bill itself, it does not bind the acceptor, except in favor of a person to whom it was shown and who, on the faith thereof, receives the bill for value.

§ 223. *Promise to accept; when equivalent to acceptance.*—An unconditional promise in writing to accept a bill before it is drawn is deemed an actual acceptance in favor of every person who, upon the faith thereof, receives the bill for value.

RIGHTS OF PARTIES AS TO QUALIFIED ACCEPTANCE.—

§ 224. *Time allowed drawee to accept.*—The drawee is allowed twenty-four hours after presentment in which to decide whether or not he will accept the bill; but the acceptance, if given, dates as of the day of presentation.

§ 225. *Liability of drawee retaining or destroying bill.*—Where a drawee to whom a bill is delivered for acceptance destroys the same or refuses within twenty-four hours after such delivery, or within such other period as the holder may allow, to return the bill accepted or non-accepted to the holder, he will be deemed to have accepted the same.

§ 226. *Acceptance of incomplete bill.*—A bill may be accepted before it has been signed by the drawer, or while otherwise incomplete, or when it is overdue, or after it has been dishonored by a previous refusal to accept, or by non-payment. But when a bill payable after sight is dishonored by non-acceptance and the drawee subsequently accepts it, the holder, in the absence of any different agreement, is entitled to have the bill accepted as of the date of the first presentment.

§ 227. *Kinds of acceptances.*—An acceptance is either general or qualified. A general acceptance assents without qualification to the order of the drawer. A qualified acceptance in express terms varies the effect of the bill as drawn.

§ 228. *What constitutes a general acceptancy.*—An acceptance to pay at a particular place is a general acceptance unless it expressly states that the bill is to be paid there only and not elsewhere.

§ 229. *Qualified acceptance.*—An acceptance is qualified which is:

1. Conditional, that is to say, which makes payment by the acceptor dependent on the fulfillment of a condition therein stated:

2. Partial, that is to say, an acceptance to pay part only of the amount for which the bill is drawn;

3. Local, that is to say, an acceptance to pay only at a particular place;

4. Qualified as to time;

5. The acceptance of some one or more of the drawees, but not of all.

§ 230. *Rights of parties as to qualified acceptance.*—The holder may refuse to take a qualified acceptance, and if he does not obtain an unqualified acceptance, he may treat the bill as dishonored by non-acceptance. Where a qualified acceptance is taken, the drawer and indorsers are discharged from liability on the bill, unless they have expressly or impliedly authorized the holder to take a qualified acceptance, or subsequently assent thereto. When the drawer or an indorser receives notice of a qualified acceptance, he must within a reasonable time express his dissent to the holder, or he will be deemed to have assented thereto.

Duty of Collecting Bank.—A bank acting as collecting agent has no authority to receive anything less than an unqualified acceptance. (*Walker* v. *N. Y. State Bank*, 9 N. Y. 582.)

PRESENTMENT FOR ACCEPTANCE.—

§ 240. *When presentment for acceptance must be made.*—Presentment for acceptance must be made:

1. Where the bill is payable after sight or in any other case where presentment for acceptance is necessary in order to fix the maturity of the instrument; or

2. Where the bill expressly stipulates that it shall be presented for acceptance; or

3. Where the bill is drawn payable elsewhere than at the residence or place of business of the drawee.

In no other case is presentment for acceptance necessary in order to render any party to the bill liable.

§ 241. *When failure to present releases drawer and indorser.*—Except as herein otherwise provided, the holder of a bill which is required by the next preceding section to be presented for acceptance must either present it for acceptance or negotiate it within a reasonable time. If he fails to do so, the drawer and all indorsers are discharged.

§ 242. *Presentment; how made.*—Presentment for acceptance must be made by or on behalf of the holder at a reasonable hour, on a business day, and before the bill is overdue, to the drawee or some person authorized to accept or refuse acceptance on his behalf; and

1. Where a bill is addressed to two or more drawees who are not partners, presentment must be made to them all, unless one has authority to accept or refuse acceptance for all, in which case presentment may be made to him only;

2. Where the drawee is dead, presentment may be made to his personal representative;

3. Where the drawee has been adjudged a bankrupt or an insolvent, or has made an assignment for the benefit of creditors, presentment may be made to him or to his trustee or assignee.

§ 243. *On what days presentment may be made.*—A bill may be presented for acceptance on any day on which negotiable instruments may be presented for payment under the provisions of sections one hundred and thirty-two and one hundred and forty-five of this act. When Saturday is not otherwise a holiday, presentment for acceptance may be made before twelve o'clock noon on that day.

§ 244. *Presentment when time is insufficient.*—Where the holder of a bill drawn payable elsewhere than at the place of business or the residence of the drawee has not time

with the exercise of reasonable diligence to present the bill for acceptance before presenting it for payment on the day that it falls due, the delay caused by presenting the bill for acceptance before presenting it for payment is excused and does not discharge the drawers and indorsers.

§ 245. *Where presentment is excused.*—Presentment for acceptance is excused and a bill may be treated as dishonored by non-acceptance in either of the following cases:

1. Where the drawee is dead or has absconded, or is a fictitious person or a person not having capacity to contract by bill;

2. Where after the exercise of reasonable diligence, presentment cannot be made;

3. Where, although presentment has been irregular, acceptance has been refused on some other ground.

WHEN DISCHARGED BY NON-ACCEPTANCE.—

§ 246. *When discharged by non-acceptance.*—A bill is dishonored by non-acceptance:

1. When it is duly presented for acceptance, and such an acceptance as is prescribed by this act is refused or cannot be obtained; or

2. When presentment for acceptance is excused and the bill is not accepted.

§ 247. *Duty of holder where bill not accepted.*—Where a bill is duly presented for acceptance and is not accepted within the prescribed time, the person presenting it must treat the bill as dishonored by non-acceptance or he loses the right of recourse against the drawer and indorsers.

§ 248. *Rights of holder where bill not accepted.*—When a bill is dishonored by non-acceptance, an immediate right of recourse against the drawers and indorsers accrues to the holder, and no presentment for payment is necessary.

PROTEST.—

§ 260. *In what cases protest necessary.*—Where a foreign bill appearing on its face to be such is dishonored by non-acceptance, it must be duly protested for non-acceptance, and where such a bill which has not previously been dishonored by non-acceptance is dishonored by non-payment, it must be duly protested for non-payment. If it is not so protested, the drawer and indorsers are discharged. Where a bill does not appear on its face to be a foreign bill, protest thereof in case of dishonor is unnecessary.

§ 261. *Protest; how made.*—The protest must be annexed to the bill, or must contain a copy thereof, and must be under the hand and seal of the notary making it, and must specify:

1. The time and place of presentment;

2. The fact that presentment was made and the manner thereof;

3. The cause or reason for protesting the bill;

4. The demand made and the answer given, if any, or the fact that the drawee or acceptor could not be found.

Certificate of Protest, Value of.—As competent evidence, a notarial certificate of protest is sufficient without further proof, and is accepted in the courts even though the notary at a subsequent trial cannot recall the details. (*Sherer* v. *Easten Bank*, 33 Pa. St. 134.)

Presentment and Demand by Notary.—In the absence of custom and usage to the contrary, presentment and demand must be made personally by the notary. (*Commerical Bank* v. *Varnum*, 49 N. Y. 269.)

§ 262. *Protest; by whom made.*—Protest may be made by:

1. A notary public; or

2. By any respectable resident of the place where the bill is dishonored, in the presence of two or more creditable witnesses.

§ 263. *Protest; when to be made.*—When a bill is protested, such protest must be made on the day of its dishonor, unless delay is excused as herein provided. When a bill has been duly noted, the protest may be subsequently extended as of the date of the noting.

§ 264. *Protest; where made.*—A bill must be protested at the place where it is dishonored, except that when a bill drawn payable at the place of business or residence of some person other than the drawee, has been dishonored by non-acceptance, it

must be protested for non-payment at the place where it is expressed to be payable and no further presentment for payment to, or demand on, the drawee is necessary.

§ 265. *Protest both for non-acceptance and non-payment.*—A bill which has been protested for non-acceptance may be subsequently protested for non-payment.

§ 266. *Protest before maturity where acceptor insolvent.*—Where the acceptor has been adjudged a bankrupt or an insolvent, or has made an assignment for the benefit of creditors, before the bill matures, the holder may cause the bill to be protested for better security against the drawer and indorsers.

§ 267. *When protest dispensed with.*—Protest is dispensed with by any circumstances which would dispense with notice of dishonor. Delay in noting or protesting is excused when delay is caused by circumstances beyond the control of the holder and not imputable to his default, misconduct, or negligence. When the cause of delay ceases to operate, the bill must be noted or protested with reasonable diligence.

§ 268. *Protest where bill is lost, et cetera.*—Where a bill is lost or destroyed, or is wrongly detained from the person entitled to hold it, protest may be made on a copy or written particulars thereof.

ACCEPTANCE FOR HONOR.—

§ 280. *When bill may be accepted for honor.*—Where a bill of exchange has been protested for dishonor by non-acceptance or protested for better security and is not overdue, any person not being a party already liable thereon may, with the consent of the holder, intervene and accept the bill supra protest for the honor of any party liable thereon or for the honor of the person for whose account the bill is drawn. The acceptance for honor may be for part only of the sum for which the bill is drawn; and where there has been an acceptance for honor for one party, there may be a further acceptance by a different person for the honor of another party.

§ 281. *Acceptance for honor; how made.*—An acceptance for honor supra protest must be in writing and indicate that it is an acceptance for honor, and must be signed by the acceptor for honor.

§ 282. *When deemed to be an acceptance for honor of the drawer.*—Where an acceptance for honor does not expressly state for whose honor it is made, it is deemed to be an acceptance for the honor of the drawer.

§ 283. *Liability of acceptor for honor.*—The acceptor for honor is liable to the holder and to all parties to the bill subsequent to the party for whose honor he has accepted.

§ 284. *Agreement of acceptor for honor.*—The acceptor for honor by such acceptance engages that he will on due presentment pay the bill according to the terms of his acceptance, provided it shall not have been paid by the drawee, and provided also that it shall have been duly presented for payment and protested for non-payment and notice of dishonor given to him.

§ 285. *Maturity of bill payable after sight; accepted for honor.*—Where a bill payable after sight is accepted for honor, its maturity is calculated from the date of the noting for non-acceptance and not from the date of the acceptance for honor.

§ 286. *Protest of bill accepted for honor, et cetera.*—Where a dishonored bill has been accepted for honor supra protest or contains a reference in case of need, it must be protested for non-payment before it is presented for payment to the acceptor for honor or referee in case of need.

§ 287. *Presentment for payment to acceptor for honor; how made.*—Presentment for payment to the acceptor for honor must be made as follows:

1. If it is to be presented in the place where the protest for non-payment was made, it must be presented not later than the day following its maturity;

2. If it is to be presented in some other place than the place where it was protested, then it must be forwarded within the time specified in section one hundred and seventy five.

§ 288. *When delay in making presentment is excused.*—The provisions of section one hundred and forty-one apply where there is delay in making presentment to the acceptor for honor or referee in case of need.

PAYMENT FOR HONOR.—

§ 300. *Who may make payment for honor.*—Where a bill has been protested for non-payment, any person may intervene and pay its supra protest for the honor of any person liable thereon or for the honor of the person for whose account it was drawn.

§ 301. *Payment for honor; how made.*—The payment for honor supra protest in order to operate as such and not as a mere voluntary payment must be attested by a notarial act of honor, which may be appended to the protest or form an extension to it.

§ 302. *Declaration before payment for honor.*—The notarial act of honor must be founded on a declaration made by the payer for honor, or by his agent in that behalf declaring his intention to pay the bill for honor and for whose honor he pays.

§ 303. *Preference of parties offering to pay for honor.*—Where two or more persons offer to pay a bill for the honor of different parties, the person whose payment will discharge most parties to the bill is to be given the preference.

§ 304. *Effect on subsequent parties where bill is paid for honor.*—Where a bill has been paid for honor all parties subsequent to the party for whose honor it is paid are discharged, but the payer for honor is subrogated for, and succeeds to, both the rights and duties of the holder as regards the party for whose honor he pays and all parties liable to the latter.

§ 305. *Where holder refuses to receive payment suprd protest.*—Where the holder of a bill refuses to receive payment supra protest, he loses his right of recourse against any party who would have been discharged by such payment.

§ 306. *Rights of payer for honor.*—The payer for honor, on paying to the holder the amount of the bill and the notarial expenses incidental to its dishonor, is entitled to receive both the bill itself and the protest.

BILLS IN SET.—

§ 310. *Bills in sets constitute one bill.*—Where a bill is drawn in a set, each part of the set being numbered and containing a reference to the other parts, the whole of the parts constitute one bill.

§ 311. *Rights of holders where different parts are negotiated.*—Where two or more parts of a set are negotiated to different holders in due course, the holder whose title first accrues is as between such holders the true owner of the bill. But nothing in this section affects the rights of a person who in due course accepts or pays the part first presented to him.

§ 312. *Liability of holder who indorses two or more parts of a set to different persons.*—Where the holder of a set indorses two or more parts to different persons he is liable on every such part, and every indorser subsequent to him is liable on the part he has himself indorsed, as if such parts were separate bills.

§ 313. *Acceptance of bills drawn in sets.*—The acceptance may be written on any part and it must be written on one part only. If the drawee accepts more than one part, and such accepted parts are negotiated to different holders in due course, he is liable on every such part as if it were a separate bill.

§ 314. *Payment by acceptor of bills drawn in sets.*—When the acceptor of a bill drawn in a set pays it without requiring the part bearing his acceptance to be delivered up to him, and that part at maturity is outstanding in the hands of a holder in due course, he is liable to the holder thereon.

§ 315. *Effect of discharging one of a set.*—Except as herein otherwise provided where any one part of a bill drawn in a set is discharged by payment or otherwise the whole bill is discharged.

PROMISSORY NOTES AND CHECKS.—

§ 320. *Promissory note defined.*—A negotiable promissory note within the meaning of this act is an unconditional promise in writing made by one person to another, signed by the maker, engaging to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer. Where a note is drawn to the maker's own order, it is not complete until indorsed by him.

Certificate of Deposit.—Under the statute a certificate of deposit in the ordinary form is a negotiable promissory note. (*Forest* v. *Safety Banking & Trust Co.*, 174 Fed. Rep. 345.)

§ 321. *Check defined.*—A check is a bill of exchange drawn on a bank, payable on demand. Except as herein otherwise provided, the provisions of this act applicable to a bill of exchange payable on demand apply to a check.

Cashier's checks, whether certified or not are construed under the statute as bills of exchange payable on demand. (*Singer Mfg. Co.* v. *Summers*, 143 N. C. 103.)

REASONABLE TIME FOR PRESENTMENT OF CHECKS.—

§ 322. *Within what time a check must be presented.*—A check must be presented for payment within a reasonable time after its issue or the drawer will be discharged from liability thereon to the extent of the loss caused by the delay.

General Rule.—Reasonable time ends with the end of the next business day after delivery of the check. (*Dehoust* v. *Lewis*, 128 App. Div. [N. Y.] 131.)

§ 323. *Certification of check; effect of.*—Where a check is certified by the bank on which it is drawn the certification is equivalent to an acceptance.

Certification by Drawee.—Certification of a check by a bank at the request of the payee is equivalent to payment to the drawee and to deposit to his credit. The drawer is absolved from further liability to the payee, even if the bank fails thereafter.

Certification by Drawer.—Certification of a check by a bank at the request of the drawer, does not become effective until delivery to the payee. (*Anglo-South Am. Bank* v. *Nat. City Bank*, 161 App. Div. [N. Y.] 268.) The effect of such a certification is that the check is genuine and the certifying bank becomes liable thereon with the drawer. (*Davenport* v. *Palmer*, 152 App. Div. [N. Y.] 761.)

§ 324. *Effect where the holder of check procures it to be certified.*—Where the holder of a check procures it to be accepted or certified the drawer and all indorsers are discharged from liability thereon.

§ 325. *When check operates as an assignment.*—A check of itself does not operate as an assignment of any part of the funds to the credit of the drawer with the bank, and the bank is not liable to the holder, unless and until it accepts or certifies the check.

§ 326. *Recovery of forged check.*—No bank shall be liable to a depositor for the payment by it of a forged or raised check, unless within one year after the return to the depositor of the voucher of such payment, such depositor shall notify the bank that the check so paid was forged or raised.

§ 330. *Negotiable instruments given for patent rights.*—A promissory note or other negotiable instrument, the consideration of which consists wholly or partly of the right to make, use or sell any invention claimed or represented by the vendor at the time of sale to be patented, must contain the words "given for a patent right" prominently and legibly written or printed on the face of such note or instrument above the signature thereto; and such note or instrument in the hands of any purchaser or holder is subject to the same defenses as in the hands of the original holder; but this section does not apply to a negotiable instrument given solely for the purchase price or the use of a patented article.

§ 331. *Negotiable instruments for a speculative consideration.*—If the consideration of a promissory note or other negotiable instrument consists in whole or in part of the purchase price of any farm product, at a price greater by at least four times than the fair market value of the same product at the time, in the locality, or of the membership and rights in an association, company or combination to produce or sell any farm product at a fictitious rate, or of a contract or bond to purchase or sell any farm product at a price greater by four times than the market value of the same product at the time in the locality, the words, "given for a speculative consideration," or other words clearly showing the nature of the consideration, must be prominently and legibly written or printed on the face of such note or instrument above the signature thereof; and such note or instrument, in the hands of any purchaser or holder, is subject to the same defenses as in the hands of the original owner or holder.

§ 332. *How negotiable bonds are made non-negotiable.*—The owner or holder of any corporate or municipal bond or obligation (except such as are designated to circulate as money, payable to bearer), heretofore or hereafter issued in and payable in this State, but not registered in pursuance of any State law, may make such bond or

obligation, or the interest coupon accompanying the same, non-negotiable, by subscribing his name to a statement indorsed thereon that such bond, obligation or coupon is his property; and thereon the principal sum therein mentioned is payable only to such owner or holder, or his legal representatives or assigns, unless such bond, obligation or coupon be transferred by indorsement in blank, or payable to bearer, or to order, with the addition of the assignor's place of residence.

Banks and Banking

CAPITAL OF BANKS.—The capital of a bank is virtually a **trust fund for creditors**, most of whom are the depositors. The capital must be kept unimpaired and in case of a deficiency through losses or otherwise, an **assessment** may be levied on the stockholders. (*Chicago Title etc. Co.* v. *Omaha State Bank*, 86 Fed. Rep. 863.)

LIABILITY OF STOCKHOLDERS.—

Liability Attached to Ownership of Bank Stock.—The liability attached to ownership of bank stock for bank debts is **statutory** and for the benefit of creditors. (*Swethers* v. *Western Carolina Bank*, 155 N. C. 283.)

Double Liability of Stockholders Statutory.—The double liability of stockholders of **national banks** under Revised Statutes of the United States, Section 5151, is a resultant of contract whereby stockholders acquire stock, and the operation of law. That liability continues until stockholders cause their names to be removed from the records. A mere transfer of shares without changing the corporate records does not free them from liability. (*Williams* v. *Vreeland*, 244 Fed. Rep. 346.) In the case of death the liability attaches to the estate of the stockholder (*Rankin* v. *Miller*, 207 Fed. Rep. 602.) Many **states** have similar laws governing the liability of stockholders of state banks.

Transfer of Stock.—Stockholders of national banks divest themselves of double liability imposed by the federal statutes for the protection of creditors by transferring their stock when the banks are solvent, or even when insolvent, by a bona fide transfer without knowledge of the insolvency; the only ground for holding them liable after a transfer is fraud. (*Fowler* v. *Crouse*, 175 Fed. Rep. 646.)

Necessity of Transfer on Books of Company.—Stockholders of an insolvent bank who, though they had disposed of their stock, failed to have it transferred upon the books of the corporation, were liable as stockholders to bank creditors. (*Van Tuyl* v. *Robin*, 142 N. Y. S. 535.)

No Right to Set-off.—Since all creditors of an insolvent bank are entitled to share pro rata in the trust fund created by the enforcement of the statutory double liability of stockholders imposed by the United States Revised Statutes, Sections 5226, 5227, stockholders of national banks have no right to set off against such liability, the amount of their unpaid deposit accounts in the banks. (*Williams* v. *Rose*, 218 Fed. Rep. 898.) The same principle of law is applied in most states against the stockholders of state banks.

LIABILITY OF BANK DIRECTORS.—There is a liability of bank directors for failure to perform the duties which the general principles of law casts upon them when they become directors, distinct from and in addition to the duties and liabilities expressly imposed by the statutes. (*Williams* v. *Brady et al.*, 232 Fed. Rep. 740.)

In addition to the specific duties defined in the national banking law, directors of national banks are under a common law obligation, to depositors and share-

holders as well as to borrowers, to exercise at least **ordinary care and prudence** in the supervision and administration of the bank's affairs. While knowledge may be essential to render directors liable for breach of duty specially imposed by the statute, this does not prevent the application of the common law rule in measuring violations of common law duties. (*Bowerman* v. *Hamner, Rec. of First Nat. Bank of Salmon*, 250 U. S. 504.)

The statutory liability of directors of national banks as prescribed in Revised Statutes, Section 5239, is the measure of the right of recovery against them for loss resulting solely from their violation of the express provisions of the statute; but that does not exclude their common law liability for negligence in the management of the business of their banks, in violation of their oath of office, which results in loss to their creditors and stockholders. (*McCormick* v. *King et al.*, 241 Fed. Rep. 737.)

Directors Severally Liable.—The directors of national banks are severally liable for the failure to perform their official duties, and suit may be brought against one, all, or any number of them. (*Williams* v. *Brady et al.*, 232 Fed. Rep. 740.)

When Fiduciary Relation of Directors Ceases.—The fiduciary relation between a bank and its directors ceases when they leave the board. (*Receiver of Atlantic Nat. Bank of Providence R. I.* v. *Conley et al.*, 257 U. S. 260.)

Liability of Banks for Acts of Officers.—Banks are liable for the acts of their officers where those acts are within the scope of their duties and apparent authority. (*Chemical Nat. Bank* v. *Armstrong*, 83 Fed. Rep. 556.)

COLLECTIONS.—

Ordinary Duty of Collecting Agents.—The ordinary duty of banks receiving notes for collection extends no further than to make proper demand of payment, and sometimes in case of non-payment to take such further action as may be necessary to secure and preserve the liability of all parties by protest and notice as may be required by the law of the State. (*Carpenter* v. *Nat. Shawmut Bank*, 187 Fed. Rep. 1.)

Authority for Collection is Limited.—Banks receiving notes for collection only have no authority to extend the maturity of the notes or sell them. (*In re L. Danos Planting & Mfg. Co.*, 238 Fed. Rep. 791.)

What Constitutes Collection and Payment.—When a bank has performed the function of collecting and crediting a check, the transaction is closed and, in the absence of fraud or mutual mistake, the transaction is **equivalent to payment** in the usual course as though presented to another bank and paid over the counter. (*Nat. Bank* v. *Burkhardt*, 100 U. S. 686; *American Nat. Bank of Nashville* v. *Miller*, 229 U. S. 517.)

Liability of Banks for Default of Sub-Agent.—The courts of the several states take opposite views on this subject. **First view** is that the collecting bank is liable for the acts of its sub-agents in making collection of bank items. In the states following this rule the depositor need only look to the collecting bank which he can hold responsible for its actions and those of its sub-agents. (*Exchange Nat. Bank* v. *New York City Third Nat. Bank*, 112 U. S. 276.) This view is held in Arkansas, Colorado, Georgia, Kansas, Louisiana, Michigan, Minnesota, Montana, New Jersey, New York, Ohio, Pennsylvania, Texas, and England.

Second view is that a collecting bank employing another bank or person as a sub-agent in collecting bank items is bound only to use reasonable care in selecting competent sub-agents who are worthy of trust. Its liability ends

there and in case of any default the depositor must look to the sub-agent for redress and cannot hold the collecting bank. (*Wilson* v. *Corlinville Nat. Bank*, 187 Ill. App. 222.) Second view followed in Alabama, California, Connecticut, Florida, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, North Carolina, South Dakota, and Wisconsin.

Liability of National Banks for Default of Sub-Agents.—National banks receiving commerical paper in one state for collection in another are liable for any neglect of duty occuring in collection, whether arising from default of their own officers or employees, or from that of their sub-agents or correspondents. Such obligations may be modified by contract, which, however, will not be inferred from knowledge that the receiving banks must or intend in due course of business to forward the paper to other banks for collection. (*Taylor & Bournique Co.*, v. *Nat. Bank of Ashtabula*, 262 Fed. Rep. 168.)

COLLECTION BANKS—DUTIES AND LIABILITIES.—The duties of banks having items for collection are to act **in good faith,** use due skill, care and diligence in making proper presentment and demand for payment, and in case of non-payment to give **proper notice of dishonor** required by the laws of the state to protect the holder and preserve the liabilities of the parties on the instruments for collection. (*Pittsburgh Exchange Nat. Bank* v. *N. Y. Third Nat. Bank*, 112 U. S. 276.)

Payment in Money Only.—Unless specifically authorized collecting banks having paper for collection can only accept money or what is considered as money in banking circles. (*National Life Ins. Co.* v. *Mather*, 118 Ill. App. 491; *Bradley Lumber Co.* v. *Bradley County Bank*, 206 Fed. Rep. 41.)

Must Follow Instructions.—When banks have instruments for collection which are connected with other transactions, such as delivering warehouse receipts, bills of lading, goods, etc., which are to be delivered only on payment of the paper sent for collection, it is necessary for the banks to follow instructions and they are liable for any losses in deviating from such instructions. (*Peoples Nat. Bank* v. *Freeman Nat. Bank*, 169 Mass. 129.)

LIABILITY OF COLLECTING BANKS SUMMARIZED.—Collecting banks are liable:

1. For failure to use due diligence in presentation of paper for acceptance and payment;
2. For taking irregular acceptance;
3. For failure to give notice, or reasonable notice of dishonor;
4. For not making protest on foreign bills;
5. For failure to return promptly unpaid paper.

DEPOSITS.—Relation of depositor to the bank is that of debtor and creditor. In making ordinary and regular deposits, the title to the items of deposit pass to the bank which credits the depositor for a like amount. (*Clement Nat. Bank* v. *State of Vermont*, 231 U. S. 120.) There is no trust relation, and in case of failure of the bank the depositor has no preference and must share pro rata with general creditors.

"Special Deposit" Defined.—A "special deposit" implies the custody of property without the authority in the custodians to use it, and the right of the owner to receive back the identical thing deposited. (*Tuckerman* v. *Mearns et al.*, 262 Fed. Rep. 607.)

Special Deposits—Relation of Parties.—While ordinarily the relation between banker and depositor is that of debtor and creditor, yet if the deposit

is made for a specified purpose the bank becomes *a bailee* of the depositor In such a case a bank is not entitled to apply the balance against an indebtedness to it from the depositor. (*Continental & Commerical Trust & Savings Bank* v. *Chicago Title & Trust Co.*, 199 Fed. Rep. 704.)

Open Accounts.—Deposits in a bank under a running check account with the privilege to the depositor to withdraw all or any part at any time either in person or by check, creates a contract for the **payment of money on demand without interest.** (*Forscheim* v. *Mechanics & Traders Bank*, 206 N. Y. 745.)

Ownership of Deposits.—Deposits are **not the property of the depositors** but the bank receiving them; the relation of the bank and its depositors being that of debtor and creditor, deposits are the assets of the bank. (*Anderson* v. *Farmers Loan & Trust Co.*, 241 Fed. Rep. 322.) On the other hand, a bank must pay out the deposits on proper orders of the depositor, of balances standing in the name of a depositor and the bank cannot question a depositor's right thereto. (*Murphy* v. *Franklyn Sav. Bank*, 131 App. Div. [N. Y.] 759.)

Depositor's Passbooks.—The reception of a passbook by a depositor with entries made therein without examination of the same and without complaint constitutes an implied acquiescence in the correctness of the entries and makes the entries an account stated between the parties. (*Pospisil* v. *Hajicek*, 190, Ill. App. 638.)

Right of Set-Off.—The general rule is that the bank and depositor have mutual rights of set-off in their accounts. Where a depositor is indebted to a bank he is entitled to set-off this indebtedness against his credit balance in the bank even though the bank is insolvent. (*Building, etc. Co.* v. *New York Northern Bank*, 206 N. Y. 400.) On the other hand a bank may look to the credit balance in its hands for repayment of any matured indebtedness to it by the depositor. (*Walsh* v. *First Nat. Bank of Maysville*, 201 Fed. Rep. 522.)

Unmatured Debts—Set-Off.—A bank has no right to set-off or to apply a debt against the depositors credit balance until such debt matures and becomes due. (*Irish* v. *Citizens Trust Co.*, 163 Fed. Rep. 880.) A bank cannot withhold payment of a fund on deposit or refuse payment of a check on the ground that it holds a note which will mature at some future date for payment for which it seeks to hold the deposit. (*Elzy* v. *Morrison*, 180 Ill. App. 711.)

PAYMENT.—

Written Agreement Not Necessary.—Since the law implies a promise from banks in accepting deposits that they will repay all money deposited, it is not necessary to have written agreements. (*Fircano* v. *Columbia Nat. Bank*, 118 App. Div. [N. Y.] 567.) Such deposits may be withdrawn in part from time to time. (*Lafayette Trust Co.* v. *Haldane*, 146 App. Div. [N. Y.] 553.)

Banks Must Pay Proper Holder of Checks.—Payment of checks must be made to the person who is the holder as designated by the maker or by the subsequent indorsers. Banks are therefore bound to require **identification.** (*U. S.* v. *Nat. Bank of Commerce*, 205 Fed. Rep. 433.) Where checks are made payable to bearer such identification is not necessary.

Payment Only on Direction of Depositors.—The relation between banks and depositors being that of debtor and creditor, the banks can justify a payment on the depositors' accounts only upon the actual direction of the depositors. (*Seaboard Nat. Bank* v. *Bank of America*, 193 N. Y. 26.)

Banks Cannot Question Purpose of Checks.—It is the duty of banks to honor checks of depositors to the extent of their deposits without regard to

the purpose for which the checks were given. (*Limick* v. *Nutting*, 140 App. Div. [N. Y.] 265.)

Overdrafts and Banks Refusal to Make Partial Payment of Check.—A bank is bound to honor checks to the extent of the depositors credit balance, but if the amount of his balance is insufficient to pay a check in full a bank may decline to pay the check and is under no obligation to apply the depositors' balance as a partial payment of it.

Overdrafts and Payment by Banks.—When a depositor draws upon a bank in excess of his balance and the bank honors the order, the payment is a **loan to the depositor,** which the latter impliedly promises to pay.

Where a bank notifies a depositor that his check had been presented for payment and that there were no funds to pay it, and the depositor promises to reimburse the bank if it would pay the check, the bank is entitled to recover the amount so paid. When a bank pays checks drawn upon it, the presumption is that the drawer had funds to meet the checks, but such presumption may be rebutted.

CORPORATE FUNDS.—

Deposits and Withdrawals.—Banks in which corporate funds are deposited are not trustees, quasi trustees, factors or agents of corporations but debtors only, and such banks must satisfy themselves that the officers of the corporation signing checks are authorized to do so. Failure to determine this question is at their peril. (*Anderson* v. *Farmer L. & T. Co.*, 241 Fed. Rep. 322.)

Corporate Funds for Officers' Use.—Banks which receive from officers of corporations, corporate obligations for their individual use, drawn by themselves in their own favor, or if banks receive from such officers money or securities of the corporations in payment of the officers' personal debts, do so at their (the banks') peril. Banks are thereby put on inquiry to determine whether the officers had authority to make such use of the corporations' property. (*Anderson* v. *Farmers Loan & Trust Co.*, 241 Fed. Rep. 322.)

Unauthorized Payment of Corporate Checks.—Banks are liable to corporate depositors for the amount of checks paid which are drawn without the authority of the corporations. (*Guaranty State Bank & Trust Co.* v. *Oklahoma Coal Co.*, 209 Fed. Rep. 350.)

TRUST FUNDS.—Banks receiving deposits in the name of an estate are charged with knowledge of the effect of entries relating to the deposits and knowledge that the administrator's misappropriation would be a breach of trust.

Banks having notice that they are dealing with trust funds are bound by information obtainable on inquiry if pressed until the truth is ascertained. Bankers with knowledge that funds deposited are trust funds are held liable on appropriation in breach of trust to refund the money. (*Allen* v. *Puritan Trust Co.*, 211 Mass. 409.)

Where a bank received without inquiry checks drawn by one as executor of an estate, which checks were deposited to his individual credit, and the bank received some of the proceeds in payment of its own debt, it was liable to the estate for the amount of the checks received. (*Bischoff* v. *Yorkville Bank*, 218 N. Y. 106.)

FORGED CHECKS.—Banks are presumed to have knowledge of the signature of their depositors and payments made by them on forged checks cannot be charged against the accounts of the depositors whose names were forged.

The banks are liable for the amounts so paid. (*Morgan* v. *U. S. Mortgage and Trust Co.*, 208 N. Y. 218.)

Forged Indorsements.—Banks are bound to pay valid checks of depositors, but they cannot charge against the depositors accounts money paid on forged checks or on checks to which the banks obtained title by forged indorsements. (*United States* v. *Nat. Bank of Commerce of Seattle*, 205 Fed. Rep. 433.)

Where Forger Is a Stranger to the Parties.—Where a party forging a check was a stranger to the drawee and to the person receiving the money on the check, and they were equally innocent, the drawee, which is the bank, must stand the loss, for the risk of paying out money on a forged signature of a depositor is one the banker must assume. (*Trust Co. of America* v. *Hamilton Bank of N. Y. City*, 127 App. Div. [N. Y.] 515.)

Account Credited with Proceeds from Forged Check.—Where a check sent to a bank for collection, has been credited to the depositor it may be charged back on being discovered that it is a forgery. (*Union Nat. Bank* v. *Franklin Nat. Bank*, 249 Pa. 375.)

Banks Must Know Payee.—When checks are presented for payment it is the bank's duty to know that there is such a person as the payee named in the check and that the person presenting it is entitled to receive payment. In the absence of investigation the bank pays at its own risk. (*U. S.* v. *Nat. Bank of Commerce of Seattle*, 205 Fed. Rep. 433.) Where a bank pays a check on another bank made payable to the order of a certain payee and another person indorsed the payee's name thereon without authority, the bank is liable to the true payee. (*Ellery* v. *Peoples Bank*, 114 N. Y. S. 108.)

Negligence of Depositors.—Banks are not liable for payment on forged checks where the **depositors' negligence** contributed to such payments and the banks have been free from negligence. (*Morgan* v. *U. S. Mortgage and Trust Co.*, 208 N. Y. 218.)

Raised and Altered Checks.—Banks must bear losses incurred through payment on checks which have been altered, either by raising the amount, changing the date, name of the bank on which they are drawn or where checks payable to designated person are changed to bearer. (*Critten* v. *Chemical Nat. Bank*, 171 N. Y. 219; *Chicago Sav. Bank* v. *Block*, 126 Ill. App. 128.)

Duties of Depositors to Examine Returned Checks.—One of the duties of depositors to their bank is to examine returned checks. When the passbook is written up or bank statement received with the cancelled checks charged against the depositor's account, he should examine them within a **reasonable time** and report any forgeries or alterations which he has discovered. If this is not done and his delay has resulted in a detriment to the bank, he is precluded from disputing the correctness of payments as shown by the bank statement. (*Shattuck* v. *Guardian Trust Co.*, 145 App. Div. [N. Y.] 734; *Leather Mfrs. Nat. Bank* v. *Morgan*, 117 U. S. 96; *Hammerschlag Mfg. Co.* v. *Importers and Traders National Bank of New York*, 250 Fed. Rep. 105.)

Bank Statements—Need for Examining.—A depositor has such relation to his bank that he is bound to give heed to the periodical statements coming from the bank in connection with the return of his passbook and cancelled checks showing the balance of his account. If he interposes no objections to such statements the presumption naturally follows that he deems them correct and the bank has the right to rely on such presumption and act upon it in the future. (*National Bank of Commerce of Tacoma* v. *Tacoma Mill Co.*, 182 Fed. Rep. 1.)

A bank will not be held liable for overpayment of checks where checks were written and altered by the bookkeeper and where the depositor's passbook was written up and returned with cancelled checks each month and no claim was made by the depositor until more than a year after the raising of the checks commenced. (*Hammerschlag Mfg. Co.* v. *Importers and Traders Nat. Bank of New York*, 250 Fed. Rep. 105.)

LIABILITY FOR REFUSING TO PAY CHECKS.—Banks are under obligation to honor their depositors' checks to the extent of the depositor's credit balance. A refusal to pay without good and sufficient reasons will warrant recovery of substantial damages. (*Schaffner* v. *Ehrman*, 139 Ill. App. 109.)

May Sue Without Further Demand.—Depositors having funds in banks sufficient to meet checks drawn by them may sue the banks for refusal to honor the checks when presented without any further demand. (*Levine* v. *State Bank*, 141 N. Y. S. 596.)

Banks' Obligation Is to their Depositors, Not to Payees.—Banks are under no obligation to payees to pay checks, being only answerable to the depositors for refusal to pay. (*Columbia-Knickerbocker Trust Co.* v. *Miller*, 215 N. Y. 191.)

Banks by their contract with depositors must pay on their accounts, to the holders of checks bearing the genuine signatures of depositors, the amounts called for, provided such amounts are to their credit. (*Limick* v. *A. J. Nutting & Co.*, 140 App. Div. [N. Y.] 265.)

STOP PAYMENT.—A drawer of an uncertified check may stop payment on it at any time before it is presented to the bank for payment. The bank is bound by such order and if it pays after such notice it does so at its peril. (*Glenman* v. *Rochester Trust Co.*, 209 N. Y. 12.)

The death of the drawer of a check revokes the authority of its payee to collect the check and of the bank to pay it. When payment is made in good faith without knowledge of the drawer's death and in the course of business a bank is relieved from any liability. (*Glenman* v. *Rochester Trust & Safe Deposit Co.*, 209 N. Y. 12.) A bank which pays checks after the death of the drawer with no knowledge of his death is not liable for the amount thereof. (*In re Stacey's Estate*, 152 N. Y. S. 717.)

CERTIFIED CHECKS.—A bank in certifying a check enters into an absolute undertaking to pay the check when it is presented. Certification is **equivalent to the acceptance** of the check by the bank and implies that the check is drawn on sufficient funds in possession of the bank which have been set aside for its payment and that the funds will be applied to pay the check when presented. (*Goshen Nat. Bank* v. *Bingham*, 118, N. Y. 349.)

Banks' Liability on Certified Checks.—The certification of a check by a bank, like the acceptance of a draft, creates an original, actionable liability against the bank, and implies that, when the check is certified, the drawer has sufficient funds in the bank, and that they have been set apart and will be retained for the holder whoever he may be, and whenever the check may be presented. (*Merchant's Bank of Valdosta* v. *Baird*, 160 Fed. Rep. 642.)

Banks Liable Only to Bona Fide Holders of Certified Check.—A bank which certifies a check, though the depositor is without funds, is not liable to anyone, save a bona fide holder for value. (*National City Bank of Seattle* v. *Titlow*, 233 Fed. Rep. 838.)

When Certification Discharges Maker.—Certification of a check at the request of the drawer does not discharge him; but where it is certified at the

request of the holder, the drawer is discharged from further liability. (*Times Square Auto Co.* v. *Rutherford Nat. Bank*, 77 N. J. Law 649.) Certification of a check at the drawer's instance merely operates as an insurance that the check is genuine, and that the certifying bank will become bound for its payment to the payee. (*Davenport* v. *Palmer*, 211 N. Y. 596.)

NOTES PAYABLE AT BANKS DO NOT AUTHORIZE BANKS TO PAY.—The relation of debtor and creditor and not principal and agent exists between a bank and its depositor. Therefore, when a depositor makes a note payable at a bank in which he has funds, that does not constitute the bank his agent to pay it. (*Baldwin Bank of Penn Yan* v. *Scott*, 155 App. Div. 881.)

Agencies for Collection—Notes Payable at Banks.—When a bank at which notes are payable accepts an agency from the owner to collect them the bank is bound to preserve for him every right he would have had if another party had accepted and performed the duty of such agent. (*Security Nat. Bank of Sioux City, Iowa* v. *Old Nat. Bank of Battle Creek, Mich.*, 241 Fed. Rep. 1.)

Bad Checks

ISSUING BAD CHECKS A CRIME.—A majority of the states have passed laws making the issuance of bad checks a crime, the nature of which is variously defined as a misdemeanor, felony or larceny.

Such laws have been adopted in practically all states and the District of Columbia.

The Bad Check Law of New York as amended in 1923 is as follows:

> Any person who, with intent to defraud, shall make or draw or utter or deliver any check, draft or order for the payment of money upon any bank or other depositary, knowing at the time of such making, drawing, uttering or delivering that the maker or drawer has not sufficient funds in or credit with such bank or other depositary for the payment of such check, although no express representation is made in reference thereto, shall be guilty of attempted larceny, and if money or property is obtained from another thereby is guilty of larceny and punishable accordingly.
>
> In any prosecution under this section as against the maker or drawer thereof, the making, drawing, uttering or delivering of a check, draft or order, payment of which is refused by the drawee because of lack of funds or credit, shall be *prima facie* evidence of intent to defraud and of knowledge of insufficient funds in or credit with such bank or other depositary; where such check, draft or order has been protested, the notice of protest thereof shall be admissible as proof of such presentation, non-payment and protest, and shall be presumptive evidence that there was a lack of funds in or credit with such bank or other depositary.
>
> The word "credit" as used herein, shall be construed to mean an arrangement or understanding with the bank or depositary for the payment of such check, draft or order.

IMPORTANT ELEMENTS.—

Insufficient Funds.—Practically all the statutes charge a maker with a crime when he negotiates a check and has no account or, if he has an account, knows that he has insufficient funds to meet it.

Intent.—Most statutes contain a provision to the effect that where a check is issued and payment refused on account of lack of funds or credit, intent to defraud and knowledge of insufficient funds is constructively established for purposes of prosecution.

Specified Time to Make Good.—In a majority of states a maker has a specified time in which to make good a check drawn on insufficient funds.

This period is usually ten days. If the check is not honored within the prescribed statutory period the fraudulent intent is fastened on the maker.

POST-DATED CHECKS.—The weight of authority seems to hold that post-dated checks do not come within the statute. The reasoning followed is:

"The giving of a check presently payable, is an implied representation by the drawer that he then has funds on deposit in the bank upon which it is drawn sufficient to meet it upon its presentation for payment. The giving of a post-dated check carries with it no such implication, but rather the contrary. It is a mere promise to discharge a present obligation on a future day. And the fact of its non-payment when the due date arrives—without more—is no more evidence that it was given with fraudulent intent than is the permitting of a promissory note to go to protest proof of such intent or the failure to pay the purchase price of goods sold on credit standing alone evidence of fraud in the making of the contract. Fraud is never presumed, but must always be proved, and an intent to defraud, cannot be predicated solely upon the mere non-performance of a future promise. The citation of authority in support of such proposition is unnecessary. Its application under facts similar to those presented in the present case led to a reversal of a conviction in *Brown* v. *State* 166 Ind. 85 and in *State* v. *Winter* 98 S. C. 294." (*State* v. *Barone*, N. J. L. 1923.)

The foregoing principle is followed in most states except:

Arizona	Idaho*	Michigan
California	Kentucky	Nevada*
Delaware	Maine	Wyoming

In those states marked by (*) their Supreme Courts have not as yet passed on the subject.

PRE-EXISTING DEBT.—The giving of a check, where there are insufficient funds to meet it, in payment of a pre-existing debt, does not come within the law in those states which define the crime as larceny. This is followed in New York, New Jersey, Colorado, and other states except those mentioned in the next paragraph.

The states which do not seem to follow this principle but which consider the giving of a bad check for a pre-existing debt a crime, are as follows:

Alabama	Kansas	North Dakota
Arizona	Maine	Ohio
Arkansas	Maryland	Oklahoma
Connecticut*	Michigan	Oregon*
Delaware	Missouri*	Rhode Island
Florida	Montana*	Utah
Idaho*	Nebraska*	Wisconsin
Indiana	Nevada	Wyoming*

In those states indicated by (*) their Supreme Courts have not passed on the question. The lower courts however have held in most instances that the statutory penalty covers the issuance of checks for pre-existing debts.

PROCEDURE WHEN BAD CHECK IS RECEIVED.—The procedure to be followed to take advantage of the statutes is for the recipient of a bad check to notify the maker and demand that payment be made within the time allowed by the statute, generally ten days. Such notice should be served personally on the maker of the check. If payment is not made good within that time, the facts should be laid before the District Attorney of the county having jurisidiction. Arrest should not be ordered without an indictment by a grand

jury in cases which relate to post-dated checks and checks in payment of pre-existing debts, the reason being the uncertainty of such cases under the statutes of the several states. Making an arrest without these precautions will lay a person open to an action for false imprisonment or malicious prosecution.

False Financial Statements

FALSE STATEMENTS UNLAWFUL.—A number of states have enacted laws declaring that the making of a false financial statement for the purpose of obtaining credit is a misdemeanor punishable by fine or imprisonment.

STATES HAVING SUCH LAWS.—The following states have enacted such laws:

Arkansas	Maine	Oklahoma
California	Maryland	Oregon
Connecticut	Michigan	Pennsylvania
Delaware	Missouri	Rhode Island
Florida	Nebraska	Utah
Illinois	New Hampshire	Vermont
Indiana	New Jersey	Washington
Kentucky	New York	West Virginia
Louisiana		Wyoming

NATURE OF STATE LAWS.—Although the laws of the various states on this subject differ in minor details and impose different penalties, they are substantially like the **New York statute** as follows:

Any person

1. Who shall knowingly make or cause to be made, either directly or indirectly, or through any agency whatsoever, any false statement in writing, with intent that it shall be relied upon, respecting the financial condition, or means or ability to pay, of himself, or any other person, firm or corporation, in whom he is interested, or for whom he is acting, for the purpose of procuring in any form whatsoever, either the delivery of personal property, the payment of cash, the making of a loan or credit, the extension of a credit, the discount of an account receivable, or the making, acceptance, discount, sale or indorsement of a bill of exchange or promissory note, for the benefit of either himself or of such person, firm or corporation; or,

2. Who, knowing that a false statement in writing has been made, respecting the financial condition, or means, or ability to pay, of himself, or such person, firm or corporation in which he is interested, or for whom he is acting, procures, upon the faith thereof, for the benefit either of himself or of such person, firm or corporation, either or any of the things of benefit mentioned in subdivision one of this section; or,

3. Who, knowing that a statement in writing has been made, respecting the financial condition, or means, or ability to pay of himself or such persons, firm or corporation, in which he is interested or for whom he is acting, represents on a later day, either orally or in writing, that such statements theretofore made, if then again made on said day, would be then true, when in fact, said statement if then made would be false, and procures upon the faith thereof, for the benefit either of himself or of such person, firm or corporation, either or any of the things of benefit mentioned in subdivision one of this section,

Shall be guilty of a misdemeanor and punishable by imprisonment for not more than one year or by a fine of not more than one thousand dollars, or both fine and imprisonment.

PENAL LAWS.—In some states statutory provisions are made penalizing the giving of false financial statements when property, money, credit or anything of value is obtained on the basis of the statement.

Nature of Penal Laws.—Section 442 of the Penal Law of New York reads as follows:

Where property is purchased by aid of a duly signed financial statement and in said statement the buyer shall state that he conducts a specified kind of business and keeps books of account of said business, upon failure to pay for such property at maturity of the account, the seller may, at any time within ninety days thereafter, request the buyer to produce his said books of account within ten days after such request. The buyer shall then permit the seller to fully examine such books of account and to make copies of any part thereof. Failure to so produce the books is presumptive evidence that each and every pretense relating to the purchaser's means or ability to pay, in said statement contained, was false when made and known to the buyer to be false.

States Having Penal Laws.—The following states have penal laws which punish those who furnish false financial statements:

Colorado	Ohio
Georgia	Tennessee
Nevada	Virginia
New York	Wisconsin

False Statements to Banks.—The following states have enacted statutes relating specifically to giving false statements to banks:

Colorado	Tennessee
Georgia	Virginia
Nevada	Wisconsin
Ohio	

IMPORTANT ELEMENTS SUMMARIZED.—In order to convict an offender under the statute it is necessary to prove the following:

First: That the statement was made for the purpose of obtaining credit. This is sufficient in New York and several other states. Some, however, hold that a crime is not committed until property is obtained on the statement.

Second: That the statement is false in a material way. If the grantor of credit relies on a statement subsequently found to be false and would not have extended the credit if the facts had been shown, the discrepancies in the statements are obviously material.

Third: That the statement was made with intent that it shall be relied on.

Fourth: That the statement was made within the state or county having jurisdiction where prosecution is brought.

Interest

DEFINITION.—**Interest** is "money to be paid for the use of capital, on a loan of money, or forbearance of a debt and becomes part of and incident to a debt; or it is damages for the detention of a debt due, and fixed by law at a given rate, in proportion to the amount of money lent, or detained, and the time for which it is thus lent or detained." (*Corcoran* v. *Henshaw*, 8 Gray Mass. 267.)

Compound interest is "interest added to the principal as the former becomes due, and thereafter made to bear interest." (*Hovey* v. *Edmison*, 3 Dak. 449.)

Compound interest is **not favored by the courts** and will not be allowed unless authorized by statute or by contract, expressed or implied. (*Timberlake* v. *First Nat. Bank*, 43 Fed. Rep. 231.)

Legal interest is the rate prescribed by law which will prevail in the absence of special agreement between the parties.

Legal Rate of Interest in Different States

	%
Alabama	8
Arizona	6
Arkansas	6
California	7
Connecticut	6
Delaware	6
District of Columbia	6
Florida	8
Georgia	7
Idaho	7
Illinois	5
Indiana	6
Iowa	6
Kansas	6
Kentucky	6
Louisiana	5
Maine	6
Maryland	6
Massachusetts	6
Michigan	5
Minnesota	6
Mississippi	6
Missouri	6
Montana	8
Nebraska	7
Nevada	7
New Hampshire	6
New Jersey	6
New Mexico	6
New York	6
North Carolina	6
North Dakota	6
Ohio	6
Oklahoma	6
Oregon	6
Pennsylvania	6
Rhode Island	6
South Carolina	7
South Dakota	7
Tennessee	6
Texas	6
Utah	8
Vermont	6
Virginia	6
Washington	6
West Virginia	6
Wisconsin	6
Wyoming	7

Lawful interest means any rate of interest up to the maximum set by statute for which interest may be contracted. In many states parties may agree on any rate of interest within the prescribed statutory maximum. Such agreements should be in writing and comply with the requirements of the local statutes. The maximum of such interest rate is set forth in the following table:

Arizona	Not exceeding 10%
Arkansas	" " 10%
California	" " 12%
Colorado	" " 12% on amounts to $300 and any rate above this amount.
Connecticut	" " 12%
District of Columbia	" " 8%
Florida	" " 10%
Georgia	" " 8%
Idaho	" " 10%
Illinois	" " 7%
Indiana	" " 8%
Iowa	" " 8%
Kansas	" " 10%
Louisiana	" " 8%
Maine	Any rate parties may agree to.
Massachusetts	" " " " " "
Michigan	Not exceeding 7%
Minnesota	" " 8%
Mississippi	" " 8%
Missouri	" " 6%
Montana	" " 10%
Nebraska	" " 10%
Nevada	" " 12%
New Hampshire	Any rate parties may agree to.
New Mexico	" " not exceeding 10%
New York	Corporations cannot plead usury. Special statute on call loans over $5,000.
North Dakota	Not exceeding 10%
Ohio	" " 8%
Oklahoma	" " 10%
Oregon	" " 10%

Rhode Island	not exceeding	30%
South Carolina	" "	8%
South Dakota	" "	10%
Tennessee	" "	8%
Texas	" "	10%
Utah	" "	12%
Washington	" "	12%
Wisconsin	" "	10%
Wyoming	" "	10%

WHAT LAW GOVERNS.—In general, and in the absence of agreement, where interest is reserved it is governed by the law of the place where the contract was made. (*Carro* v. *Zane*, 149 U. S. 122.) Where, however, a contract involving interest is made in one state to be performed in another, the law of the place of performance will govern. (*Coghlan* v. *South Carolina R. Co.*, 142 U. S. 101.) **Parties may agree** to be bound by the interest laws of the place where the contract was entered into instead of the place of performance. (*Kellogg* v. *Miller*, 13 Fed. Rep. 198.)

Strict Construction.—Interest laws, being statutory and in derogation to the common law, must be strictly construed. **Construction and interpretation** of contracts for interest are governed by the same rules that apply to contracts in general.

INTEREST NOTICE ON INVOICES.—Where invoices sent with goods contain the terms of credit, together with words to the effect that bills bear interest after maturity and they are accepted without objection, it constitutes a contract for interest. (*Braun* v. *Hess*, 187 Ill. 283.)

CUSTOM OF TRADE.—A trade custom which is legal, well known, long established, and generally agreed to within the trade, that interest is due under given conditions, results in an implied contract to pay interest. (*Woerz* v. *Schumacher*, 161 N. Y. 530.)

Knowledge of Trade Customs.—"This knowledge may be established by presumptive as well as direct evidence. It may be inferred from the uniformity and long continuance of the usage, from the fact that a party has for some time been in the particular trade to which it relates, from the previous dealings between the parties, or from any other facts tending to show its general notoriety." (*Fisher* v. *Sargent*, 10 Cush. [Mass.] 250.)

WRITTEN INSTRUMENTS.—As a general rule all written instruments referring to the payment of money carry with them an implied promise to pay interest if not paid when due. (*Goodwin* v. *Fox*, 129 U. S. 601.)

OPEN ACCOUNT.—As a general rule interest is **not allowed** on an unliquidated open and running account. "While, as a general rule, the law does not allow interest on an open account, it is perfectly **competent for the debtor to agree** to pay interest on it, and if he does so agree, he is bound to pay interest on the amount that is actually due, when it is ascertained, even though he disputes certain items in the account. There is no law prohibiting such a contract." (*Lee* v. *Hill*, 92 S. C. 114.)

SETTLED ACCOUNTS.—In the absence of agreement to the contrary, interest will be allowed on settled accounts where the balance due has been agreed to by the parties. (*Cooper* v. *Coates*, 21 Wall 105.)

RATE OF INTEREST.—The rate of interest agreed to by the parties, if within the statutory limitations, runs on at that rate at simple interest until the obligation is paid. (*Ohio* v. *Frank*, 103 U. S. 697.) "To hold that the

stipulated rate of interest shall not govern after the maturity of the contract would be to disregard the plain intent and common understanding of men in their contracts, to pervert the unmistakable meaning of their language and unjustly to pay defaulting debtors a premium not contemplated by them for their default. It is probable that no man ever promised a stipulated rate of interest who did not well understand that it was to be borne as long as the debt was unpaid. When the contracting parties stipulate for a rate of interest different from that prescribed by law, their agreement, if not prohibited by the statute, fixes the incident of the debt which attends it as long as it exists, and to say the rate fixed by statute to govern in the absence of a conventional rate shall at any time supersede the rate agreed on, is to do violence to the right of parties to make their agreement a substitute for the statutory rate." (*C. J. Campbell in Meaders* v. *Gray*, 60 Miss. 400.)

WHEN INTEREST BEGINS.—Interest runs from the time agreed to by the parties. Where no agreement is made the interest runs from the time the principal becomes due. (*Am. Iron etc., Mfg. Co.* v. *Seaboard Air Line R. Co.*, 233 U. S. 261.)

When Demand is Necessary.—In debts, due bills, and obligations payable on demand, interest does not begin to run until demand for payment is made. (*Ledyard* v. *Bull*, 119 N. Y. 62.)

When Demand is Not Necessary.—Interest will begin to run although demand is not made or necessary, at maturity of the obligation when the debtor knows when and what he is to pay, where the law sets the time or obligation, or the debtor has placed obstacles in the way of the creditor to prevent him from making demand.

WHEN INTEREST STOPS.—Interest will stop running in the following instances:

1. On Payment of Principal.—

2. Improper Acts of the Creditor.—Making it impossible for the debtor to pay the debt. Generally interest is suspended during the period he is prevented from making payment. (*Davidson* v. *Mexican National R. Co.*, 58 Fed. Rep. 653.)

3. Laches.—Where the creditor delays unreasonably in pressing the claim against the debtor, interest cannot be collected. (*Redfield* v. *Ystalyfera Iron Co.*, 110 U. S. 174.)

4. Absence of Creditor.—Where the creditor cannot be found or is absent from the country and has left no agent to collect the debt, interest will cease if the debtor has made proper effort to find the creditor.

5. Valid Tender of Payment by Debtor at Maturity.—The reason for such a rule rests in the fact that the person to whom the tender was made, if the sum tendered is sufficient to satisfy him for his debt and for his costs, is bound to take it, and if he does not while the debt is not paid, the liability of the debtor for interest is suspended." (*Hoffman* v. *Rose Dress Co. Inc.*, 179 App. Div. [N. Y.] 57.) A tender before maturity is not valid and does not stop the running of interest.

"Among the elements of a tender, where money is to be paid, in order that such tender may be effective as such, are that it must involve the **proper amount** and be **unconditional**. If either of such elements is lacking the tender is ineffective. The circumstances of the offer must be such as to leave the creditor free to accept the amount offered without prejudice to him, and without thereby rendering himself liable to be held to have impliedly admitted that the amount

tendered is all that is due." (*Kingan* v. *Maryland Casualty Co.*, 65 Ind. App. 301.)

6. Payment Suspended by Court Order.—Where the payment of the debt is suspended by reason of an order of a court of proper jurisdiction or by action of law interest ceases to accumulate. (*Thomas* v. *Western Car Co.*, 149 U. S. 95.)

7. Deposited in Court.—A deposit in court or at the direction of the court suspends the accumulation of interest. This is generally done when the debt is the subject matter of litigation. If the depository bank pays interest on the deposit the amount follows the fund and goes to the party successful in the litigation.

COMPUTATION.—As a rule interest is computed so as to obtain simple interest which will represent the interest for the period during which it should run. Compound interest is computed only where allowed by statute or contract and unless there is such authority for it will not be allowed by the courts. (*Harlan* v. *Houston*, 258 Fed. Rep. 611.)

"United States Rule."—What is generally known as the United States rule for computing interest in **partial payments** is set forth by Chancellor Kent in the leading case of *Connecticut* v. *Jackson*, 1 Johns Ch. (N. Y.) 13: "The rule for casting interest, where partial payments have been made, is to apply the payment, in the first place to the discharge of the interest then due. If the payment exceeds the interest, the surplus goes toward discharging the principal, and the subsequent interest is to be computed on the balance of principal remaining due. If the payment be less than the interest, the surplus of the interest must not be taken to augment the principal; but interest continues on the former principal until the period when the payments, taken together, exceed the interest due, and then the surplus is to be applied towards discharging the principal; and interest is to be computed on that balance, as aforesaid."

Judge Wayne stated the rule as follows: "The correct rule, in general, is that the creditor shall calculate interest, whenever a payment is made. To this interest, the payment is first to be applied; and if it exceeds the interest due, the balance is to be applied to diminish the principal. If the payment fall short of the interest, the balance of interest is not to be added to the principal so as to produce interest."

Where "United States Rule" Is Followed.—In general the foregoing rule in computing interest is followed by the courts where the contracts of the parties or the usage of trade do not indicate some other way of computing interest. In estates and relations with the government this method is also followed.

Mercantile Rule.—Where it is the agreement of the parties or the custom of the trade in which the parties are engaged to indicate the use of the Mercantile Rule for computing interest the courts have permitted it. By this method the balance of the debt is obtained by calculating the interest on each item of the debt on the one side and allowing interest on each payment on the other. This method, however, is not followed by all the courts of all jurisdictions. (*Gay* v. *Beckey*, [Mich.] 100 N. W. 920.)

ACCOUNTS.—Interest begins to run when accounts are due. It is not permissible to strike periodic balances, compute interest thereon and make the new balance a new principal on which interest is computed for the next period. (*Spain* v. *Talcott*, 165 App. Div. [N. Y.] 815.) Where, however, this is the trade custom and is acquiesced in by the debtor, the courts have permitted this method. (*Barclay* v. *Kennedy*, 2 F. Cas. No. 976.)

Usury

DEFINITION.—"Usury consists of extorting or taking a rate of interest for money, above that allowed by law. It is not necessary that money should be actually advanced, in order to constitute the offence of usury; but any pretense or contrivance whatever to gain more than legal interest, where it is the intent of the parties to contract for a loan, will make that contract usurious." (*Wilkie* v. *Roosevelt*, 3 Johns Cas. [N. Y.] 206.)

ESSENTIALS OF A USURIOUS CONTRACT.—"Three things must unite to render any contract usurious. First, there must be a loan, express or implied. Second, there must be an agreement that the money lent or, which is the same thing, that which is lent for the purpose of raising money, shall be repaid, and that without conditions or contingency. And, third, there must be an agreement to pay a greater rate of interest than that allowed by statute." (*Leavitt* v. *De Launy*, 4 N. Y. 363.)

TEST OF A USURIOUS CONTRACT.—"The test . . . . is: Will the contract, if performed, result in producing to the lender a rate of interest greater than is allowed by law, and was that result intended?" (*Smith* v. *Parsons*, Minn. 520.)

THE LENDER LIABLE.—"These laws are enacted to protect the weak and necessitous from oppression. The borrower is not *particeps criminis* with the lender, whatever his knowledge or intention may be. The lender alone is the violator of the law, and against him alone are its penalties enacted. It would be indeed strange if the only party who could violate the law had intentionally done so, and could escape its penalty because by some device or deception he had so deceived the borrower as to conceal from him the fact that he was taking usury." (*Lukins* v. *Hazlet*, 37 Minn. 441.)

USURIOUS CONTRACTS CONSTRUED AGAINST LENDER.—Contracts shown to be usurious are strongly construed against the lender. (*Union Mortgage etc. Co.* v. *Hapgood*, 97 Fed. Rep. 360.)

WHAT LAW GOVERNS.—The **situs of a contract** determines under which law the rights and liabilities of the parties shall be determined. The usury laws of that state apply. The interpretation of the contract is largely governed by the facts and intent of the parties. The intent must be in good faith and not for the purpose of evading the laws of another state; there must be some important element referable to the state where the contract has its situs and which may be the place of making or execution or residence of the parties. It must not be against public policy. (*Kellogg* v. *Miller*, 13 Fed. Rep. 198.)

USURY LAWS NOT APPLYING IN CERTAIN INSTANCES.—

Building and Loan Associations.—Some states exempt certain corporations and associations from the usury laws. Most prominent among these are building and loan associations. (*Concordia Sar. etc. Asso.* v. *Read*, 93 N. Y. 474.)

Banking Loans on Collateral Security.—Certain kinds of loans have been exempted from the operation of the usury laws, such as certain banking loans on collateral security under the New York statute.

Interest in Advance.—Generally, as a result of usage, banks are allowed to take interest in advance. This practice is not considered to be usurious. (*Alexandrian Bank* v. *Mandeville*, 2 Fed. Case No. 850.)

Pawn Brokers' Loans.—In most states loans made to individuals on pledge of personal property are not affected by the usury laws where such loans are made by licensed pawn brokers.

MASSACHUSETTS LAW ON USURY EXCEPTIONAL.—"It is to be observed in this connection that there is no law in Massachusetts against usury. Excepting a loan of less than $1,000 it is lawful to contract in writing for any rate of interest." (*In re Ponsi*, 268 Fed. Rep. 1000.) Section 3, Chapter 107, Laws of Massachusetts, sets forth that if there is no agreement or provision of the law for a different rate such as governing small loans on personal property as security (mentioned in the next paragraph) the rate of interest shall be 6 per cent per annum but it shall be lawful to pay, reserve or contract for any rate of interest or discount. No greater rate than 6 per cent can be recovered in a suit unless the agreement to pay it is in writing.

MASSACHUSETTS LAW ON LOANS UNDER $1,000 TO INDIVIDUALS.—The law of Massachusetts (Chapter 140, Sections 86 to 112) regulates in detail the manner in which loans of $1,000 or less are made to individuals on security of personal property. The rate of interest cannot exceed 18 per cent per annum. must be only for the time the loan runs, and the total other charges for services, etc., cannot exceed $5. The lender must keep full records of each loan which may be subject to inspection by state officers. This section of the Massachusetts law does not apply to pawn brokers.

CORPORATIONS INCAPABLE OF PLEADING USURY LAWS.—In New York and several other states, corporations cannot plead the usury laws as a defense, the effect being the repeal of usury laws in so far as they relate to the obligations of corporations. (*Curtis* v. *Leavitt*, 15 N. Y. 9.)

Why Corporations Cannot Plead Usury Laws.—The statutes of many states do not permit corporations to set up the defense of usury. The underlying reason is: "These laws were originally based upon the assumption that the needy borrower was in some degree in the hands of the lender. Government has, therefore, assumed that it was a duty incumbent upon it to protect the former against the rapacity of the latter by adequate pains and penalties. In regard to natural persons, subject to the contingencies of business, often with little or no capital to start with, these considerations might apply with great force; but in regard to corporations organized for the purpose of concentrating in one undertaking the contributions of a large number of individuals until the aggregate shall amount to the capital supposed to be requisite for the successful prosecution of such undertaking, the legislature may well have assumed that no such protection was necessary; that if corporations thus organized became borrowers it would not be from necessity, but voluntarily, to enable them to carry forward some enterprise which afforded a reasonable expectation of profits sufficient to enable them to repay the necessary interest without loss or sacrifice." (*Southern L. Ins. etc., Co.* v. *Packer*, 17 N. Y. 51.)

MONEY OR ITS EQUIVALENT THE SUBJECT MATTER OF CONTRACT.—The loan must be money or its equivalent to come under the statutes. However, a loan of money repayable in chattels is not usurious no matter how extortionate it may be. (*Cutler* v. *How*, 8 Mass. 257.) Where however, the price of this chattel is fixed by agreement and the chattel is to be returned and compensation charged for its detention, this is construed as interest and is usurious if in excess of the amount allowed by law. (*Galveston Ins. Co.* v. *Grymes*, 94 Tex. 609.) Here the use of the chattel is considered merely a means to hide usury.

It was held (*Dry Dock Bank* v. *American L. Ins. Co.*, 3 N. Y. 344) that "the true construction of the two last statutes, as I apprehend, is and has been, that no more than the prescribed rate of interest should be taken, on a loan, or forbearance of money, directly, or indirectly, by way of loan of goods or choses in action, or in any other manner. In a word, the statute would have been as comprehensive without the specifications of 'goods and things in action' as it now is. The terms 'interest' and 'forbearance' cannot be predicated of any other than a loan of money, actual or presumed. Interest is defined to be a certain profit for the use of the loan; and forbearance, the giving a further day when the time originally limited for the return of the loan, has passed. Both imply that the thing loaned has an established value, so that the lender on its return, with the compensation fixed by law for the use and risk, may receive a 'certain profit.' Now this is true only of money, which is legally supposed to have a fixed, unchangeable value in itself, and to be consequently the true measure of value of all other property. A fixed rate per cent on money, therefore, in contemplation of law, is supposed to give to the lender a 'certain profit,' because the thing loaned is of the same value at the end of the term as at its commencement."

SALES OR EXCHANGES OF PROPERTY.—Sale or exchange of property if bona fide cannot become usurious under any conditions. But the courts will not countenance a usurious loan in the form of a sale. (*Roat* v. *Pinney*, 11 Wis. 84.)

NOTES FOR DEFERRED PAYMENTS.—In general, where notes are taken in deferred payment and contain interest at a rate greater than allowed by law on loans, such interest is not considered usurious where the parties acted in good faith. (*Cutler* v. *Wright*, 22 N. Y. 472.) The reasoning behind this rule is stated by Lord Tenterden in *Beete* v. *Bidgood*, 7 B and C 453 (Eng.).

"The agreement was founded partly upon what was considered the present price of the estate, and partly upon what was considered its price if paid for at a future day. The only difficulty has been occasioned by calling the difference between these two prices interest; but it is our duty to look not at the form and words, but at the substance of the transaction; and as on the one hand, we should not pay attention to the words of the contract, if the substance of it went to defeat the provisions of the Statute of 12 Anne, c. 16, so, on the other hand, we ought not to rely upon the words, so as to defeat the contract, if in substance the transaction was legal. It appears to me that in substance this was a contract for the sale of the estate at the price of £20,800 to be paid by installments; in that there was no illegality."

DISGUISED SALES TO COVER USURIOUS LOANS.—Where a borrower as a condition precedent to obtaining a loan is compelled to purchase from the lender property at an exorbitant price and the purchase price taken out of the sums loaned and although the money loaned on its face bears lawful interest, it is considered usurious. (*Stockwell* v. *Richardson*, 101 N. Y. 643; *Earnest* v. *Haskins*, 100 Pa. St. 551.)

Where property is sold by the lender to the borrower at an exorbitant price to be paid at a future date so as to enable the seller to resell the goods immediately for cash and so obtain the funds he needs, it is held to be usurious where the purchaser's obligation was greater than the fair value of the property plus lawful interest. (*Quackenbos* v. *Sayer*, 62 N. Y. 344.) The same holds true where securities are sold payable at a future date in an amount greater than the value of the securities when sold, plus lawful interest, the sale of the securities being made for the purpose of enabling the purchasing borrower to resell or

exchange them to obtain the money he needs. If the borrower's obligation to pay at a future time is greater than the present value of the securities and lawful interest, it is construed as usurious. (*Meaker* v. *Fiera*, 145 N. Y. 165; *Orleans Bank* v. *Curtis*, 11 Metc. [Mass.] 359.)

If property is sold by the borrower to the lender at a given price with a binding condition that the borrower repurchase the property at a higher price, which price is greater than the purchase price and lawful interest, the transaction is considered usurious. (*Fielder* v. *Darwin*, 50 N. Y. 43.)

PURCHASE AND SALE OF NOTES AT A DISCOUNT NOT USURIOUS.—Notes after issue may be bought and sold at any price the parties may agree to without becoming charged with usury.

The Rule.—A note which has been negotiated by the maker, and which might, if at maturity, be enforced against him by the holder, may be sold at a greater discount than the rate of 6 per cent per annum, without involving the purchaser in the penalties for usury. But the note must be perfect and available to the holder to make it salable by him. The test is the right to maintain an action upon it, against the parties to it, if it was then due.

PURCHASE AND SALE OF MORTGAGES AT DISCOUNT.—A bona fide purchase or sale of an existing mortgage issued for a consideration at less than its face value is **not usurious.** However, a pretended sale of a mortgage to cover a usurious loan will not be allowed. (*Green* v. *Elmer*, 8 N. Y. 422; *Colebour* v. *State Sav. Inst.*, 90 Ill. 152; *Stewart* v. *Hamel*, 91 N. Y. 199.)

OTHER USURIOUS DEVICES.—The courts will look with disfavor on devices resorted to as a cover for usurious loans. The fiction of form is set aside in order to arrive at the real intent of the parties. If the transaction is in fact a usurious loan the courts will consider it unlawful.

EFFECT OF USURY.—Usury being a statutory offence, the penalty is according to what the statute of the particular state prescribes. These statutes are not in harmony, but in most states they provide for forfeiture of the usurious interest; in others, the excess of usurious interest above the legal interest; and in several, the usurious loan is void as to both principal and interest.

When Contract Is Void.—When a usurious contract is void under the statute the lender cannot enforce the contract. (*Ormund* v. *Hobart*, 36 Minn. 306.)

When Interest Is Forfeited.—When the statutes declare all the interest forfeited in a usurious contract the lender can nevertheless recover the principal loaned. (*Kesner* v. *Trigg*, 98 U. S. 50.)

When Usurious Excess Is Forfeited.—In those states where the statute declares the excess over the lawful interest forfeited, the lender can recover the principal and legal interest. (*Yancy* v. *Teter*, 39 Ind. 305.)

EVIDENCE AND BURDEN OF PROOF.—Usury, being a statutory offence, will never be presumed. A violation of the law must be shown by competent evidence by the party alleging the violation, on whom lies the burden of proof. (*Stillman* v. *Northrup*, 109 N. Y. 473.)

RULE IN NEW YORK.—In New York the legal rate of interest is 6 per cent per annum. Usury is forbidden except in certain instances where the usury laws do not apply. Usurious contracts are void and the lender cannot recover principal or interest under them. Where payments of interest have been made by a borrower the excess above the legal rate can be recovered by the borrower. (Chapter 21, Section 371-373, Consolidated Laws of New York.)

RULE IN PENNSYLVANIA.—In Pennsylvania the legal rate of interest is 6 per cent per annum. Special provisions are made to govern licensed money lenders on loans of $300 or under on personal property. Usurious contracts are not void but the interest in excess of the legal rate is forfeited. Usurious interest paid by a borrower may be recovered by him. (*Steere* v. *Oakley*, 186 Pa. 582.)

Attachment

DEFINITION.—"The word 'attachment' as ordinarily understood in American law has reference to a writ the object of which is to hold property to abide the order of the court for the payment of a judgment in the event the debt shall be established." (*Wilder* v. *Inter-Island Navigation Co.*, 211 U. S. 245.)

STATUTORY REMEDY.—Proceedings under a writ of attachment are not common law actions but are founded on statutes and hence are strictly construed in favor of those against whom they are directed. (*Kelderhouse* v. *McGarry*, 143 N. Y. S. 741.)

BASIS OF WRIT OF ATTACHMENT.—

Non-Resident.—Non-residence of the debtor in practically all states is a basis for the issuance of a writ of attachment.

Resident.—In general where the ordinary process of law can be served on a debtor by his being actually within the reach of the courts of the state, a writ of attachment will not be issued in the absence of other grounds given by statute.

Resident—Absconded or Concealed.—An attachment may be issued against a resident where he has absconded from the state or is absent or concealed so that the ordinary process of the courts cannot reach him. A mere temporary absence from the state without intent to avoid process does not authorize an attachment. (*Brekke* v. *Waite*, 36 S. D. 26.)

Fraud.—A fraudulent transfer of property is cause for issuance of a writ of attachment in most states. To warrant an attachment the fraud must be actual and intentional and not constructive fraud. (*Millang* v. *Lambros*, 153 N. Y. S. 944.) The burden of proof is on the attaching creditor to prove intent to defraud where this is the ground on which an attachment is sought. (*First State Bank of Durant* v. *Smith*, 43 Okl. 320.)

PROPERTY SUBJECT TO ATTACHMENT.—

Personal Property.—In general, personal property is subject to attachment in practically all states. Where, however, this property is pledged, as by a chattel mortgage, it is not subject to a writ of attachment to the extent of the prior lien, or pledge. (*Crutts* v. *Daly*, 145 N. Y. S. 850.) As shares of stock are personal property, they may be attached. (*Pease* v. *Chicago Crayon Co.*, 235 Ill. 391.)

PROPERTY IN THE HANDS OF THE LAW.—

Decedent's Estate.—Property of a decedent while in course of administration cannot be attached. (*Griggs* v. *Nadeau*, 221 Fed. Rep. 381.)

PROPERTY ATTACHED UNDER JURISDICTION OF COURTS.—The courts obtain jurisdiction over property upon the consummation of attachment. (*Bank of Appleton City* v. *Griffith*, 192 Mo. App. 443.)

REQUISITES OF WRIT OF ATTACHMENT.—In order to justify the granting of an attachment the plaintiff must set forth by affidavit one of the

causes for which an attachment will be issued under the statutes of that state. (*Jonasson* v. *Herrick*, 126 App. Div. [N. Y.] 827.) The information set forth in the moving papers must be such as a person of reasonable prudence would be willing to accept and act on. (*Kelderhouse* v. *McGarry*, 143 N. Y. S. 741.) The proof of facts relied on must be sufficient to establish specified matters and must be more than the mere belief or conclusions of witnesses. (*Hanford* v. *Duchastel*, 87 N. J. L. 205.)

BONDS ON ATTACHMENT.—A creditor applying for a writ of attachment in most states is required to furnish a bond to pay costs and damages to the defendant for loss sustained by reason of a wrongful issuance and levy of writ of attachment. (*Green* v. *Hoppe*, 175 S. W. [Tex.] 1117.)

WRONGFUL ATTACHMENT.—Where an attachment is wrongfully sued out the plaintiff is liable to an action in damages. (*Katsulius* v. *Confectiones & Bakers' Supply Co.*, 166 Ill. App. 581.)

ATTACHMENT LAWS OF VARIOUS STATES.—The attachment laws of the various states being statutory and subject to frequent changes great care must be exercised in the procedure to make use of them. The grounds on which and the nature of causes of actions under which attachments may be issued in the different states are not in harmony. When attachment proceedings are contemplated, competent legal advice should be followed.

Liens

DEFINITION.—A lien is "a security—given by law to secure the payment of money." (*Gilchrist* v. *Helena, etc. R. Co.*, 58 Fed. 708.) "A special right which one has in that of which another has the general property; and, to the extent of the lien, it is an abridgment of the dominion which the latter has in the thing." (*Hayden* v. *Delay*, Litt. Sel. Cas. [Ky.] 278.)

CLASSIFICATION OF LIENS.—Liens are generally classified as common law liens, equitable liens, and statutory liens.

Common law liens are rights to hold as security personal property in possession of the lienor or until some debt or claim on that property is paid. (*The Menominee*, 36 Fed. Rep. 197.) Title does not vest in the lienor nor has he a right to sell the property.

Equitable liens are rights granted by courts of equity to have property of another applied for the payment of a claim or debt. Such actions are rights in equity and rest on the jurisdiction of the equity courts. They differ from common law liens in that it is not necessary for the lienor to have possession of the property. (*The Menominee*, 36 Fed. Rep. 197.)

As to **statutory liens,** the statutes of the various states have definitely declared that under certain circumstances persons shall have liens on certain classes of property. Many of the common law liens have become statutory liens by legislative enactment. (*The Menominee*, 36 Fed. Rep. 197.)

ESSENTIALS.—

Rightful Possession.—To sustain a claim for a common law lien it is essential that the lienor has rightful possession of the property and the claim must be for some service rendered or debt due the claimant on the personal property held. (*Cincinnati Cooperage Co.* v. *Woodyard*, 21 Ky. L. Rep. 1221.)

Confined to Specific Property.—A lien created by contract for one debt is confined to and attaches to the personal property in possession and the claim cannot be used to create a lien for some other debt against the same person.

(*Talbot* v. *McPherson*, 23 Fed. Cas. No. 13728.) **In equity** possession of the property is not essential to sustain a lien but the property must be capable of identification. (*Drake* v. *Taylor*, 7 Fed. Cas. No. 4067.)

Most Important Statutory Liens.—Many of the states provide by statutes for liens and under what circumstances persons may have liens on certain classes of property for certain debts. Some of the more important liens of interest to a financial manager are mechanics' liens and landlords' liens.

WAIVER OF LIENS.—Liens may be waived by:

Agreement, which may be oral or written when such agreement is supported by a consideration. (*Fisher* v. *Stewart*, 191 Pa. St. 323.)

Operation of law.

Act of the holder of the lien, which is inconsistent with the continuance of the lien. (*U. S.* v. *Barney*, 24 Fed. Cas. No. 14525.)

LOSS OF LIENS.—Liens may be lost by—

Fraud on the Part of the Lien Holder.—The fraud must relate to the property and the lien relating thereto.

Voluntary parting with possession and control over the property to which the lien is attached. (*Gregory* v. *Morris*, 96 U. S. 619.)

Sale of the Property.—A lien is lost where the lien holder sells the property in a different way than that prescribed by statute for the sale of property subject to liens. (*Foltz* v. *Peters*, 16 Ind. 244.)

Failure to Assert Lien.—Withholding the property for some other reason than for the lien amounts to a failure to assert the lien and it is thereby lost. (*Folsom* v. *Barrett*, 180 Mass. 439.)

Assignment of Liens.—Common law liens may be assigned by transfer of the personal property to which the lien attaches. (*Davis* v. *National Surety Co.*, 139 Cal. 223.) Liens under the statutes require compliance with the statutory provision regarding the transfer of such liens. Equitable liens may be assigned by transferring the obligation which it secures. (*Payn* v. *Wilson*, 74 N. Y. 348.)

PREFERENCE OF LIENS.—Unless exception is made by the statutes (as in liens for wages, etc.) liens attach to property in the order in which they occur and the prior liens are entitled to satisfaction before payment is made on the account of subsequent liens. Priority in most of the statutory liens is determined by the order in which the liens are recorded according to the requirements of the statutes.

ENFORCEMENT OF LIENS.—**Statutory liens** are enforced in the manner prescribed by the statutes of the several states creating those liens. Strict adherence to the requirements as to the time, form and manner of enforcement is essential to protect the lienor's rights. Although the statutes of the several states are at variance, the essentials regarding enforcement of liens in most of them involve notice to the owner of the contemplated sale of the property to satisfy the liens, public sale of such property, and payment to the owner of the excess, if any, realized over the amount of the lien and costs of the sale.

MECHANICS' LIENS.—Mechanics' liens are statutory liens on buildings and improvements to real estate to secure payment to certain classes of persons for material, supplies, work and labor furnished for the construction, and in some states for repairs and alterations to those buildings.

General Essentials.—In order to create a lien the statutes must be complied with.

The sale of material must be for a specific building on which the lien attaches.

A lien will not be created if the sale is only on the general credit of the contractor or the owner.

A lien for labor attaches only on the building on which the work was performed.

Although some states permit oral contracts to become liens, most states require written contracts.

In New York and in the states following the **New York doctrine,** the lien is only in favor of the general contractor. The subcontractors and material men cannot obtain a lien without the consent of the contractors. To protect their interests subcontractors and material men may file written notice on the owner to retain certain amounts due them from the general contractor. The material men may secure themselves by either a right of action against the owner or by a lien upon the interest of the owners where such notice is ignored.

The Pennsylvania doctrine followed by some states is that the subcontractor and material men are given a prior lien on the building and the general contractor's lien is subordinated to theirs.

Nearly all states require recording of the contract and filing notice of the lien, generally in the office of the clerk of the county where the real estate is located and the payment of the recording fees.

The statutes generally give such liens priority over all unrecorded and subsequent transfers, liens, mortgages or other incumbrances.

Protection of Rights under Liens.—Mechanics' liens being statutory, the technicalities of proceedings thereunder must be followed closely in order to protect the interests of the lienor. The importance of competent legal advice in such situations is emphasized.

Chattel Mortgages

A chattel mortgage is "a contract made by the owner by which specific personal property is hypothecated for the performance of an act without the necessity of a change of possession." (*Kennedy* v. *Hull*, 14 S. D. 234.)

Elements of a chattel mortgage consist of "an indebtedness, a transfer of property by the debtor to the creditor to insure the payment of the debt and a right in the debtor to have all that remains after the debt is paid." (*Hostings* v. *Fithian*, 71 N. J. L. 311.)

PASSING OF TITLE AND RIGHT TO REDEEM.—"The uniform language of the authorities is that a mortgage of personal property passes the whole legal title to the mortgagee, subject, however, to be revested in the mortgagor upon the performance of the condition of the mortgage, and possibly by redemption after breach of it." (*Carson River Lumbering Co.* v. *Bryant*, 3 Nev. 313.)

DISTINGUISHED FROM OTHER TRANSACTIONS.—"A chattel mortgage is neither a sale absolute nor conditional; neither is it more than a pledge, or an absolute pledge; neither does it vest an absolute title in the mortgagee; but that a chattel mortgage is nothing but a mere security, a lien upon the property therein described, which the mortgagee may himself, or by an agent, sell for the satisfaction of his debt; and until so sold, or the mortgagor's title is foreclosed, does not vest it in the mortgagee for any other purpose except that of satisfaction." (*Shoecraft* v. *Beard*, 20 Nev. 182.)

DISTINGUISHED FROM CONDITIONAL SALE.—"It is settled beyond controversy, in nearly all of the courts of this country, that where personal

property is sold and delivered, with an agreement that the title thereto shall remain in the vendor until payment of the purchase price is made, it is a conditional sale, and the transaction cannot be held a mortgage." (*Keystone Mfg. Co.* v. *Casselius*, 74 Minn. 115.)

REMOVAL OF MORTGAGED PROPERTY TO ANOTHER STATE.—"The general consensus of judicial opinion seems to be that when personal property, which at the time is situated in a given state, is there mortgaged by the owner, and the mortgage is duly executed and recorded in the mode required by the local laws, so as to create a valid lien, the lien remains good and effectual, although the property is removed to another state, either with or without the consent of the mortgagee, and although the mortgage is not re-recorded in the state to which the removal is made." (*Shapard* v. *Hynes*, 104 Fed. Rep. 449.)

IDENTIFICATION OF PROPERTY NECESSARY.—"In order to mortgage property so as to create a lien upon it, such property must be ascertained and identified at the time of the execution of the instrument." (*Lee* v. *Cole*, 17 Ore. 559.)

EXECUTION OF CHATTEL MORTGAGES.—As between immediate parties the failure to comply with the statutory requirements would not be fatal to a chattel mortgage. But in order that such a mortgage may be held valid as to third parties the statutory provisions must be complied with. (*American Surety Co.* v. *Worcester Cycle Mfg. Co.*, 100 Fed. Rep. 40.)

FAILURE TO RECORD.—A failure to record a chattel mortgage does not affect the obligations of the mortgagor and mortgagee but is not binding on a subsequent purchaser for value who has no knowledge of the mortgage. (*St. Louis Clay Products Co.* v. *Christopher*, 152 Wis. 603.)

PURPOSE OF RECORDING.—"When a mortgage is filed as provided by the statute, it becomes effective as against all persons who extend credit to the mortgagor after that event, unless they can invalidate it upon the ground of actual fraud or for some other legal reason." (*Volker Lumber Co.* v. *Utah etc. Lumber Co.*, 45 Utah 603.) "The purpose of recording the mortgage is to give to intending purchasers or creditors notice of its existence; notice that the owner of the cattle has given the lien mentioned for the purpose stated. The object of the mortgage is to protect the mortgagee and insure the fulfillment of the original agreement of the parties. The object of the recording is to warn purchasers that they may refrain from buying until the lien is discharged, or until the mortgagor and mortgagee have set apart the particular chattels to be held under the mortgage." (*Sparks* v. *Paris Deposit Bank*, 115 Ky. 461.)

TIME FOR FILING.—A chattel mortgage should be filed immediately on delivery or at least within a reasonable time thereafter. "While the purpose of the act does not in terms require an immediate filing of a mortgage in order to make it valid against creditors or subsequent mortgagees or purchasers, the purpose of the act can only be satisfied by prompt and diligent action on the part of the mortgagee in filing his mortgage. The filing stands as a substitute for immediate delivery and an actual and continued possession of the property, and avoids the conclusive presumption of fraud which would otherwise attach to the instrument under the Act of 1833 in the absence of delivery and a change of possession of the mortgaged property. Some time must necessarily elapse between the execution and filing of the mortgage. Where it appears that due diligence was exercised in filing the mortgage and there was no unnecessary delay and no actual intervening lien has been acquired, there would seem to be no ground upon which subsequent lien holders could question the validity of the

mortgage under the Act of 1833. The filing under these circumstances would be immediate and make the mortgage valid as against liens subsequently acquired." (*Karst* v. *Gane*, 136 N. Y. 316.)

PLACE OF FILING.—The statutes as a rule indicate the place where chattel mortgages should be recorded. Generally it is the office of the clerk of the county wherein the mortgagor lives.

CHATTEL MORTGAGE ON MERCHANDISE FOR SALE.—The various states take different views regarding the giving of chattel mortgages on complete stocks of merchandise retained by the mortgagor for sale in the usual course of business.

Held Good in the Following States.—In the absence of fraud and where the proceeds of continuing sales are to be applied to the debt, chattel mortgages are considered good in the following states:

Georgia	Michigan	North Dakota
Indiana	Minnesota	Ohio
Iowa	New Jersey	Oregon
Kentucky	New Mexico	South Carolina
Maine	North Carolina	South Dakota
Maryland		Wisconsin

Held Fraudulent and Void in the Following States.—Chattel mortgages on merchandise retained by the mortgagor for sale in the usual course of his business are held fraudulent and void in the following states:

Arizona	Florida	Missouri
Arkansas	Idaho	Nebraska
California	Illinois	Tennessee
Colorado	Maryland	Texas
Connecticut	Mississippi	Virginia

New York Law.—In New York chattel mortgages on merchandise for sale are covered by Chapter 462 of the laws of 1921 which provides that:

> Every chattel mortgage, or conveyance intended to operate as a mortgage, upon a stock of merchandise in bulk or any part thereof, or on merchandise and fixtures pertaining to the conduct of the business of the mortgagor, shall be void as against the creditors of the mortgagor unless the mortgagor shall at least 5 days before the execution of such mortgage make a full and detailed inventory showing the quantity, and so far as possible with the exercise of reasonable diligence, the cost price to the mortgagor of each article to be included in the mortgage, and unless the mortgagee demand and receive from the mortgagor a written list of the names and addresses of the creditors of the mortgagor, etc., and unless the mortgagee shall at least 5 days before the execution of such mortgage notify personally, or by registered mail, each creditor whose name and address is stated in such list or of which he has knowledge, of the proposed mortgage and the terms and conditions thereof.

Exemptions

DEFINITION.—"The right of a debtor to an exemption of his property from seizure and sale for the payment of his debts is determined by the statute which creates the exemption, and only the specific articles mentioned as exempt are held to be exempted, as in the absence of such statutes all property is subject to execution." (*Roberts* v. *Carrithers*, 180 Ky. 315.)

PURPOSE.—"The purpose of the exemption is not only to protect every debtor from total destitution, but also to protect the public from the resultant necessity of providing for him as a public charge." (*In re Solomon*, 254 Fed. Rep. 503.)

PROPERTY BEYOND REACH OF CREDITORS.—"Exempt property is something toward which the eye of the creditor need never be turned." (*Taylor* v. *Winnie*, 59 Kan. 16.)

STATUTES LIBERALLY CONSTRUED.—"In construing exemption statutes . . . . they are not to be strictly construed, but such construction will be placed thereon as will carry out the obvious purpose of the legislature in enacting them—to protect the debtor." (*Finlen* v. *Howard*, 126 Ill. 259.)

WHO MAY CLAIM EXEMPTION.—Exemption being statutory the only persons who may claim exemption are those specifically provided for by the law.

Residents.—Generally in most states the benefits of the statute may be claimed only by residents. "The benevolent provision is for our own citizens —those who have a residence among us—and must be construed as not embracing cases of mere domicile, where the rights incident to domicile may be retained until a domicile is obtained elsewhere." (*Munds* v. *Cassidy*, 98 N. C. 558.)

Head of Family.—Head of family is generally entitled to exemption. Who is head of a family and the relations of family is stated in *Roco* v. *Green*, 50 Tenn. 483, as follows: "We deduce from the authorities the following general rules to determine when the relation of a family as contemplated by law exists:

1. It is one of social status, not of mere contract.
2. Legal or moral obligation on the head to support the other members.
3. Corresponding state of dependence on the part of the other members for his support."

Householder.—"The term householder sometimes covers the case of a man without a family or wife or children who keeps up a house, but it also embraces usually the head of an actual family dependent on him, whether housekeeping or not. No doubt many legal phrases may be construed differently, according to context and subject matter. But the purpose of the exemption in the garnishee law is so plainly to enable husbands and other heads of families to support the family, as well as in case of house occupancy to meet its expenses, that no reason can make it plainer." (*Pettit* v. *Muskegon Booning Co.*, 74 Mich. 214.)

Persons Engaged in Agriculture.—Generally have certain exemptions. Such persons are those who derive the support of themselves and family from tilling the soil.

Other Persons.—The statutes of the several states often give persons engaged in various trades and professions **additional exemptions** which may include their tools, books, instruments and implements necessary for them to carry on their vocation.

PROPERTY EXEMPT.—In many states certain articles are enumerated in the statutes which debtors may claim as exempt from legal process. Often the statutes are broader and cover items by general description such as household goods and furniture, clothing, foodstuffs, growing crops for home consumption, fodder for exempt animals, tools and implements required to carry on the debtor's trade or profession.

Tools.—"The word tools, as used in these statutes is presumed to embrace such implements of husbandry or of manual labor as are usually employed in, and are appropriate to, the business of the several trades or classes of the laboring community, and according to the wants of their respective employments or professions, whether farmer, mechanic, manufacturer, or, in fact,

any artisan or laborer, who may require the use of such helps to obtain his living." (*Wilkinson* v. *Alley*, 45 N. H. 551.)

EARNINGS FOR A FIXED PERIOD.—"Earnings mean the reward of labor or the price of personal service performed. They mean the gains of a person derived from his services or labor without the aid of capital. Earnings imply more than labor—one has relation more particularly to mental effort and the other to physical endeavor." (*Jones* v. *Nicoll*, 131 N. Y. S. 341.)

VALUE OF PROPERTY EXEMPTED.—The fair market value of property is generally taken to determine the amount of property which may be claimed as exempt. (*Moffett* v. *Shiekay*, 52 Ill. A. 376.) This also includes notes, accounts and other choses in action regardless of the face value of the instruments.

WHEN CLAIM FOR EXEMPTION MUST BE ASSERTED.—The statutes in some states specify when claims for exemption must be made, generally after levy or notice of execution and before the time of sale. Where no specific time is set the claim must be asserted within a reasonable time after levy and before rights of creditors have accrued and before further costs are incurred, such as advertising, commencement of sale, etc.

"The precise time when this claim and selection should be made is not specified. . . . It is as easy for him to make the demand early as late, and it is no harsh construction which requires him to claim the advantage of a statute like this at a time, and in a manner which will do the least possible injury to his honest creditors, and interpose no delay to the recovery of their just claims. We therefore hold that the claim must be asserted at least before the sale has commenced, and if the debtor waits until the sale has begun his right is gone." (*State* v. *Boulder*, 57 Md. 314.)

STATE EXEMPTION LAWS.—The exemption statutes of the several states in many instances go into considerable detail in enumerating articles which are exempt and the manner of obtaining exemption. The statutory procedure can be determined by the inhabitants of each state by consulting the local statutes.

Statutes of Limitations

DEFINITION.—Statutes of limitations are **legislative acts** limiting the time in which legal actions must be brought to enforce rights.

PURPOSE.—"Statutes of limitations are statutes of repose, intended to put at rest controverted questions of fact by compelling their production before they are affected by the infirmities of memory." (*Bettman* v. *Cowley*, 19 Wash. 207.)

OPERATE AS A BAR TO RECOVERY.—Where the full statutory period has run they operate as a bar to recovery and must be enforced as a positive rule of law when pleaded and found applicable. (*Adams* v. *Hopkins*, 144 Cal. 19.)

WAIVER AND ESTOPPEL.—The protection of the statutes may be waived by the party in whose favor it operates. Waiver may be made by express agreement, a new agreement, part payment or by implication where the party fails to plead the statute as a defence.

WHEN STATUTES OF LIMITATIONS BEGIN TO RUN.—Statutes of limitations begin to run from the time a cause of action can be maintained in a court of competent jurisdiction. "The statute (of limitations) never runs except against a cause of action, and a cause of action implies not only the

existence of a right but such a denial of it, either actual or constructive, as puts the party entitled under a necessity to act if he would preserve it." (*Cowper* v. *Cowper*, 61 Miss. 676.)

Capacity.—The statute of limitations does not begin to run until there is legal capacity. Where there is legal incapacity the statute is suspended until the disability is removed. Such incapacity may be infancy, judicially declared incompetency such as insanity, or other legal disability. (*Dunwing* v. *Ocean National Bank*, 61 N. Y. 19.)

Fixed Time.—Where a fixed time is agreed to for completion of the contract, or for payment, performance or other important element of the transaction, the statute begins to run from that time. (*Pinkum* v. *Eau Claire*, 81 Wis. 301.)

Time not Fixed.—Where no time is fixed the statutes begin to run at the expiration of a reasonable time for the performance of the contract. What a **reasonable time** is depends on the nature of the transaction, and is a question of fact to be determined by a jury.

Agent Obliged to Account for Money.—"In general, when an agent has transacted business for his principal, especially when he has received money belonging to his principal, he should make report of those facts at the earliest convenient time to the principal, unless there is something in the agreement between them which excuses the agent from rendering such account; and at all events it is the duty of the agent, when a demand is made by the principal for an account, or for the payment of money received by him, to respond according to the nature of the demand; and if he fails to do so, he cannot claim the benefit of the statute of limitations unless the conduct of the principal may have been such as to excuse him. But in order that the principal may be subject to the operation of the statute upon his claim, he must have had knowledge, either by direct notice from the agent, or by some other means, of the facts that the agent has received money and holds it for his benefit." (*Quinn* v. *Gross*, 24 Ore. 147.)

Contract of Sale.—The statute begins to run at the expiration of the term of credit or extensions thereof given to the debtors.

Breach of Contract.—The statute begins to run at the time of the breach, and not when the debtor refuses to pay or at a time subsequent to the breach when the damages are ascertained.

Deposits of Money.—Where money is deposited with banks, trust companies and other depositories, the statutes begin to run only after demand is made for repayment and refused. (*Bank of British North America* v. *Merchants National Bank*, 91 N. Y. 106.)

Negotiable Instruments.—Demand instruments as well as due bills are due and payable from the day of execution, from which time the statute runs. (*Bartlett* v. *Rogers*, 2 Fed. Case No. 1079.) As to **time instruments** the statute begins from the day of maturity of the instrument.

Mutual Current Accounts.—The statute begins to run from the date of the last transaction and applies to the entire account. (*Green* v. *Disbrow*, 79 N. Y. 1.)

A mutual current account is "a course of dealing where each party furnishes credit to the other on the reliance that upon settlement the accounts will be allowed, so that one will reduce the balance due on the other." (*In re Hiscock*, 79 Mich. 537.)

Open Accounts.—An open account, as understood by the various statutes of limitations, is one in which the dealings are mutual and current between

the parties: wherein some term of the contract is not settled and there are current dealings between them kept open because of contemplated future dealings. (*Fennell* v. *Black*, 53 N. Y. S. 797.) **Account stated** is an account as to which the parties agree, expressly or by implication of fact or law, fixing the balance resulting from previous dealings.

Where There Is Fraud.—Where fraud is of the essence of the action, the statute does not begin to run until the fraud is discovered. Fraud must be the principal ground for action and relief and not merely a collateral or incidental cause. (*Price* v. *Mulford*, 107 N. Y. 303.)

In *Gregory* v. *Spieker*, 110 Cal. 150, it was held that: "fraud was so ingrained with the breach of contract by defendant that the action, as regards the bar of the statute, at least, must be treated as one for relief on the ground of fraud."

Absence from State.—The statutes of most states provide that the running of the statute of limitations is suspended where the debtor has absented himself from the state. (*Hart* v. *Kip*, 148 N. Y. 306.) This absence must include change of residence to be effective. A mere temporary absence on business or for other purposes does not result in suspending the statutes of limitations.

War.—War suspends the statutes of limitations between citizens of the countries at war and continues until peace is restored.

REMOVAL OF BAR OF STATUTES OF LIMITATIONS.—In the United States the general rule followed by the courts is that a particular case may be taken out of the statute by:

1. A promise of the debtor to pay the debt.
2. Action by debtor which implies a promise to pay the debt.
3. Debtor waiving rights under the statute.

Definite Promise.—An express promise to pay a specific debt barred by the statute will remove the case from the operations of the statute. (*Levy* v. *Popper*, 106 App. Div. [N. Y.] 394.)

In **writing**—most states require by statute that such promises be made in writing.

Part Payment.—In most states it is held that part payment takes the debt out of the statute and starts it running anew from the time payment is made. (*Cross* v. *Allen*, 141 U. S. 528.) Such payment must be voluntary, apply to the specific debt and must be on account of a larger debt which would indicate the intention to pay the balance.

Payment of Interest.—The payment of interest on a debt will take it out of the operation of the statute and start it running again from the date interest is paid. (*Lyman* v. *Warner*, 113 Fed. Rep. 87.)

Part Payment in Full Settlement.—The debt is not taken out of the statute nor is the statute suspended where a lesser payment is made as payment of the debt in full.

APPLYING PAYMENTS.—

At Direction of Debtor.—Where payments are made by a debtor, his direction as to what the payment applies to governs in all cases.

Debtor's intention, although undisclosed, will govern payments made by him. (*Austin* v. *McClure*, 60 Vt. 453.)

Where no directions are made, the creditor may apply payments as follows:

On several unbarred notes the creditor may apply part of the payments on

each note, thereby starting the statute anew as to all. (*Taylor* v. *Foster*, 132 Mass. 30.)

On several distinct debts, if payment exceeds one or several, the surplus may be applied on another. (*Corliss* v. *Grow*, 58 Vt. 702.)

When all debts are treated as one by agreement with the debtor, payment will start the statute anew as to all of them.

When specific application of payment is not made by either the debtor or the creditor, the law applies it to the debt which became outlawed when suit was brought, but not outlawed when payment was made. (*Robinson* v. *Allison*, 36 Ala. 525.)

In an instalment account, every part of which is due but not outlawed, payment on account of one part will start the statute anew as to all parts.

If some debts are barred, and others are not, an undirected payment applied to the subsisting debts starts the statute running anew as to them. (*Blake* v. *Sawyer*, 83 Me. 129.) Where a creditor **receives money indirectly** which belongs to a debtor, he (the creditor) cannot apply the money on the account so as to stop the running of the statute. (*Drouilliard* v. *Wilson*, 1 Ohio Dec. 555.)

STATUTES OF LIMITATIONS AS A DEFENSE.—The **general rule** is that most states require the pleading of the statutes of limitations as a defense either by way of answer or by demurrer, and if such pleading is not brought out by the action the defendant is deemed to have waived his rights under the statute. (*Gormley* v. *Bunyon*, 138 U. S. 623; *West Hoboken* v. *Syms*, 49 N. J. L. 546; *Malloy* v. *Chicago R. Co.*, 109 Wis. 29.)

Avoidance of Statutes of Limitations.—Where the defendant relies on the statute of limitations, the plaintiff must set up with clearness and distinctness in his pleadings the grounds which he contends take the case out of the operation of the statute. The type of the specific pleading will be governed by the nature of the action, the subject matter, previous pleadings and acts relied on.

BURDEN OF PROOF.—In some states the burden of proof of showing that the action is within the statutory time limit is on the person bringing the action when the opposing side pleads the statute of limitations. In other states the burden of proof is on the person pleading the statute. It may be generally said that the burden of proof is on the person who claims that the statute does not apply when the pleadings and the item constituting the cause of action on their face show that they are barred by the statute. (*Mason* v. *Henry*, 152 N. Y. 529.)

STATUTES OF LIMITATIONS IN DIFFERENT STATES.—

Open Accounts.—In many states the statute of limitations on open accounts is **6 years.** The following states, however, have different periods:

	Years		Years		Years
Alabama	3	Iowa	5	North Carolina	3
Arizona	3	Kansas	3	Oklahoma	3
Arkansas	3	Louisiana	3	Texas	2
California	4	Maryland	3	Utah	4
Delaware	3	Mississippi	3	Virginia	3
District of Columbia	3	Missouri	5	Washington	3
Florida	3	Montana	5	West Virginia	5
Georgia	4	Nebraska	4	Wyoming	8
Idaho	4	Nevada	4		
Illinois	5	New Mexico	4		

Notes.—On notes, **6 years** is the period of the statute of limitations in all states except the following:

	Years		Years		Years
Arkansas	5	Kansas	5	Ohio	15
California	4	Kentucky	15	Oklahoma	5
District of Columbia	3	Louisiana	5	Texas	4
Florida	5	Maryland	3	Virginia	5
Idaho	5	Missouri	10	West Virginia	10
Illinois	10	Montana	8	Wyoming	10
Indiana	10	Nebraska	5		
Iowa	10	North Carolina	3		

Contracts.—**Six years** is the period of the statute of limitations on contracts in all states except the following:

	Years		Years
Arizona	4	Maryland	3
Arkansas	3	Missouri	5
California–Oral contracts	2	Montana	8
–Written contracts	4	Nebraska–Oral contracts	4
Delaware	3	–Written contracts	5
District of Columbia	3	Nevada–Oral contracts	4
Florida	5	–Written contracts	6
Idaho	4	New Mexico	4
Illinois	5	North Carolina	3
Iowa–Oral contracts	5	Ohio	3
–Written contracts	10	Texas	4
Kansas	3	Virginia	5
Kentucky	5	West Virginia	5
Louisiana	10	Wyoming	10

Instruments Under Seal.—Instruments under seal have a longer time under the various statutes of limitations, generally running from **ten to twenty years.** For the purpose of summarizing, the following table is presented. All states except those mentioned have a statute of limitations of **twenty years** for instruments under seal.

	Years		Years		Years
Alabama	10	Michigan	10	Oregon	10
Arizona	6	Minnesota	6	Tennessee	6
Arkansas	5	Missouri	10	Texas	4
Colorado	6	Montana	8	Utah	6
Connecticut	17	Nebraska	5	Vermont	8–15
District of Columbia	12	Nevada	6	Virginia	10
Idaho	5	New Jersey	16	Washington	6
Illinois	10	New Mexico	6	West Virginia	10
Iowa	10	North Carolina	10	Wisconsin	10–20
Kansas	5	North Dakota	10	Wyoming	10
Louisiana	10	Ohio	15		
Maryland	12	Oklahoma	5		

Sales

SALES DEFINED.—A sale is "an exchange of goods or property for money paid or to be paid." (*Hatfield* v. *State*, 9 Ind. App. 296.) "A transfer, in pursuance of a valid agreement, from one party, called the seller, to another, called the buyer, of the general or absolute title to a specific chattel, for a price, or a consideration estimated in money." (Mechem Sales 1.)

CONTRACTS TO SELL AND SALES DISTINGUISHED.—1. A contract to sell goods is a contract whereby the seller agrees to transfer the property in goods to the buyer for a consideration called the price.

2. A sale of goods is an agreement whereby the seller transfers the property in goods to the buyer for a consideration called the price.

3. A contract to sell or a sale may be absolute or conditional.

4. There may be a contract to sell or a sale between one part owner and another. (Uniform Sales Act.)

REQUISITES.—These are existence of the subject matter, either actual or potential, an agreed price in money, parties (buyer and seller) capable of contracting, and mutual assent.

ACCEPTANCE MUST BE UNQUALIFIED.—Mutual assent is essential to constitute a contract to sell. Where an offer is made, the acceptance must be unqualified and without any condition, reservation or modification. (*Malis* v. *Knapp*, 196 App. Div. [N. Y.] 628.)

PLACE OF SALE.—The law of the place where the sale is made governs. The intention of the parties controls to indicate the place of sale. If not specified a sale is said to be made at the place where the order is accepted and the goods shipped. (*Hump Hairpin Mfg. Co.* v. *Emmerson*, 293 Ill. 387.)

UNIFORM SALES ACT.—The Uniform Sales Act, as drafted by the commissioners appointed to work out uniform laws governing commercial transactions, combines the best features of the existing laws of the various states. The Uniform Sales Act has been adopted with various slight modifications in the following states and territories:

Alaska	Minnesota	Pennsylvania
Arizona	Mississippi	Rhode Island
Connecticut	Nevada	South Dakota
Idaho	Nebraska	Tennessee
Illinois	New Jersey	Utah
Iowa	New York	Wisconsin
Maryland	North Dakota	Wyoming
Massachusetts	Ohio	
Michigan	Oregon	

FORMALITIES.—The formalities required to make a valid contract apply in making a contract of sale and may be oral, in writing, partly oral and partly in writing or may be inferred from the conduct of the parties. (See Statute of Frauds in the law on **Contracts** for full treatment of sales under that statute, particularly the **requisites for oral and written contracts of sales.** In this section the law of sales is stressed and the requirements under the Statute of Frauds is dealt with briefly.)

Oral contracts in sales are not enforcible by action at law where the value of the goods exceeds the statutory limitation unless:

1. Some note or memorandum is made in writing and signed by the party to be charged or by his duly accredited agent.
2. Part of the goods are delivered and **accepted** with intent to retain it. Mere delivery is not sufficient, and acceptance must be indicated in some manner.
3. Part payment is made or a valuable consideration given to bind the contract.

Where Writing Required.—Contracts for the sale of personal property where no part is delivered and accepted and part payment is not made must be in writing signed by the person to be charged where the amount exceeds the amount under the Statute of Frauds. (See Statute of Frauds in this section for amounts under the laws of the several states.)

RECEIPT AND ACCEPTANCE.—Purchasers must actually receive and accept part of the merchandise to render the contracts of sale binding on them. (*Davis* v. *Carnegie Steel Co.*, 244 Fed. Rep. 931.)

Part payment may be money or anything of value mutually acceptable to buyer and seller as part of the purchase price. (*Wenger* v. *Gummel*, 136 Md. 80.)

WRITTEN MEMORANDUM.—The written memorandum required under the statute of frauds may be formal, as a bill of sale, or informal, made up of several notes or letters. The essentials required are a recital of the agreement, subject matter, terms, and names of parties. Most important is that the memorandum shall be signed by the person to be charged or held thereon.

SPECIFIC GOODS DEFINED.—Specific goods must be capable of identification, designation, and separation as such. A regular run of oil, grease or other product which is part of an undistinguishable quantity of a seller's regular production is not a sale of specific goods under the statute. (*Agri. Mfg. Co.* v. *Atlantic Fertilizer Co.*, 129 Md. 42.)

SUBJECT MATTER—EXISTING AND FUTURE GOODS.—1. The goods which form the subject of a contract to sell may be either existing goods, owned or possessed by the seller, or goods to be manufactured or acquired by the seller after the making of the contract to sell, called "future goods."

2. There may be a contract to sell goods, the acquisition of which by the seller depends upon a contingency which may or may not happen.

3. Where the parties purport to effect a present sale of future goods, the agreement operates as a contract to sell the goods. (Uniform Sales Act.)

Legality of Subject Matter.—The subject matter must not consist of goods the sale of which is prohibited by law, such as drugs, or if a license or permit is a prerequisite to the sale of an article, such provision of the law must first be complied with, otherwise there is no sale which will be recognized at law.

PRICE—HOW DETERMINED.—1. The price may be fixed by the contract, or may be left to be fixed in such manner as may be agreed, or it may be determined by the course of dealing between the parties.

2. The price may be made **payable in any personal property.**

3. Where the price is not determined in accordance with the foregoing provisions the buyer must pay a **reasonable price.** When there is a general market, **the market price** will in most cases be accepted as a reasonable price; but when the market is limited it will be considered only in connection with other circumstances, or even be disregarded altogether.

CONDITIONS AND WARRANTIES.—

Effect of Conditions.—1. Where the obligation of either party to a contract to sell or a sale is subject to any condition which is not performed, such party may refuse to proceed with the contract or sale, or he may waive performance of the condition. If the other party has promised that the condition should happen or be performed, such first-mentioned party may also treat the nonperformance of the condition as a breach of warranty.

2. Where the property in the goods has not passed, the buyer may treat the fulfillment by the seller of his obligation to furnish goods as described and as warranted expressly or by implication in the contract to sell as a condition of the obligation of the buyer to perform his promise to accept and pay for the goods. (Uniform Sales Act.)

EXPRESS WARRANTY.—An express warranty is a statement of fact made by the seller as to the quality, quantity, durability, or other characteristic of the thing sold. To hold the seller on his warranty the buyer must have relied

on the statements in making his purchase. (*Heath Dry Gas Co.* v. *Hurd*, 124 App. Div. 68; *Naylor* v. *McSwegan*, 21 N. Y. S. 930.)

Opinion and "Dealers' Talk."—An expression of opinion, hope or expectation is not a statement of facts and does not amount to a warranty. Likewise, commendatory statements as to the character of the articles and mere statements of opinion, although unfounded, are not sufficient to constitute warranties. (*Arnold* v. *Norfolk, etc. Hosiery Co.*, 148 N. Y. 392.)

Language Constituting Warranty.—"No particular words or forms of expression are necessary to create a warranty. A positive assertion of a matter of fact made by a seller at the time of the sale for the purpose of assuring the buyer of the fact, and inducing him to make the purchase, and accepted and relied on by the purchaser, constitutes a warranty." (*Van Horn* v. *Stantz*, 297 Ill. 530.)

IMPLIED WARRANTIES.—"An implied warranty in the case of a sale of an article is an obligation imposed by law." (*Craig* v. *Pellet*, 209 Ill. App. 368.)

Title.—The seller impliedly warrants the title to the goods sold. Where a vendor has goods for sale and in his possession it is prima facie evidence that he has title to the goods. A seller of goods impliedly warrants:

1. That he has good title;
2. The buyer will not be disturbed by adverse claims of title; and
3. The goods are free from claims, charges, and incumbrances at the time of sale. (*Smith* v. *Ruggles*, 3 N. Y. S. 329.)

Doctrine of Caveat Emptor.—In sales the doctrine of caveat emptor applies in every state except Louisiana. Under this doctrine, which means, "let the buyer beware," it is not incumbent on the seller to disclose facts which a buyer can ascertain by examining the articles. In order to charge a seller with fraud there must be a false representation or an active suppression of facts so as to convey a false impression. (*Wolf* v. *Michael*, 46 N. Y. S. 991.)

Estoppel and Waiver of Defects.—A buyer who has knowledge of a fraud or defect of an article purchased and retains the articles without objection, cannot at a later date set up fraud to have the sale set aside. (*Wellauer* v. *Fellows*, 48 Wis. 105.)

If the **buyer has examined** the goods, there is **no implied warranty** as regards defects which such examination ought to have revealed.

In the case of a contract to sell or a sale of a specified **article under its patent or other trade name, there is no implied warranty** as to its fitness for any particular purpose.

A warranty or condition as to quality or fitness for a particular purpose may be implied by the usage of trade.

An express warranty or condition does not negative a warranty or condition implied under this act unless inconsistent therewith. (Uniform Sales Act.)

Implied Warranties in Sale by Sample.—In the case of a contract to sell or a sale by sample:

1. There is an implied warranty that the bulk shall correspond with the sample in quality.
2. There is an implied warranty that the buyer shall have a reasonable opportunity of comparing the bulk with the sample.
3. If the seller is a dealer in goods of that kind, there is an implied warranty that the goods shall be free from any defect rendering them unmerchantable which would not be apparent on reasonable examination of the sample. (Uniform Sales Act.)

Samples—"As Is."—Goods sold as is from samples must conform in quality to the sample furnished even if damaged. (*Schwartz* v. *Kohn*, 155 N. Y. S. 547.)

Burden of Proof.—The burden of proof that the goods conform in quality with the sample rests on the seller. (*Grand Union Folding Box Co.* v. *Rose Mirror Works*, 173 N. Y. S. 433.)

Samples—Buyer's Approval.—Where goods for sale are subject to the buyer's approval of the sample, the buyer's decision is final. It is unnecessary for him to have or give any grounds for his decision. (*Vickers* v. *W. W. Vaughan Co.*, 204 Ill. App. 284.)

WHEN TITLE PASSES.—The following extracts from the Uniform Sales Act define when title to goods passes:

Rules for Ascertaining Intention.—

Unless a different intention appears, the following are rules for ascertaining the intention of the parties as to the time at which the property in the goods is to pass to the buyer.

Where there is an unconditional contract to sell specific goods, in a deliverable state, the property in the goods passes to the buyer when the contract is made, and it is immaterial whether the time of payment, or the time of delivery, or both, be postponed.

When Something Is to Be Done on Goods.—

Where there is a contract to sell specific goods and the seller is bound to do something to the goods, for the purpose of putting them into a deliverable state, the property does not pass until such thing be done.

Goods Sold with Return Privilege.—

When goods are delivered to the buyer "on sale or return," or on other terms indicating an intention to make a present sale, but to give the buyer an option to return the goods instead of paying the price, the property passes to the buyer on delivery, but he may revest the property in the seller by returning or tendering the goods within the time fixed in the contract, or, if no time has been fixed, within a reasonable time.

Sales on Approval.—

When goods are delivered to the buyer on approval or on trial or on satisfaction, or other similar terms, the property therein passes to the buyer.

When he signifies his approval or acceptance to the seller or does any other act adopting the transaction.

If he does not signify his approval or acceptance to the seller, but retains the goods without giving notice of rejection, then, if a time has been fixed for the return of the goods, on the expiration of such time, and, if no time has been fixed, on the expiration of a reasonable time.

Sale by a Person Not the Owner.—

Where goods are sold by a person who is not the owner thereof, and who does not sell them under the authority or with the consent of the owner, the buyer acquires no better title to the goods than the seller had, unless the owner of the goods is by his conduct precluded from denying the seller's authority to sell.

RISK ON PARTY HAVING TITLE.—The Uniform Sales Act defines the risk as follows:

Risk of Loss.—

Unless otherwise agreed, the goods remain at the seller's risk until the property therein is transferred to the buyer, but when the property therein is transferred to the buyer the goods are at the buyer's risk whether delivery has been made or not.

Buyer's Risk.—

Where delivery of the goods has been made to the buyer, or to a bailee for the buyer, in pursuance of the contract and the property in the goods has been retained by the

seller merely to secure performance by the buyer of his obligations under the contract, the goods are at the buyer's risk from the time of such delivery.

Risk on Party Delaying Delivery.—

Where delivery has been delayed through the fault of either buyer or seller the goods are at the risk of the party in fault as regards any loss which might not have occurred but for such fault.

NEGOTIABLE DOCUMENTS.—The Uniform Sales Act deals with the negotiable document as follows:

Definition of Negotiable Document of Title.—

A document of title in which it is stated that the goods referred to therein will be delivered to the bearer, or to the order of any person named in such document is a negotiable document of title.

Negotiation of Negotiable Documents by Delivery.—

A negotiable document of title may be negotiated by delivery:

(a) Where by the terms of the document the carrier, warehouseman or other bailee issuing the same undertakes to deliver the goods to the bearer, or

(b) Where by the terms of the document the carrier, warehouseman or other bailee issuing the same undertakes to deliver the goods to the order of a specified person, and such person or a subsequent indorsee of the document has indorsed it in blank, or to bearer.

Where by the terms of a negotiable document of title the goods are deliverable to bearer or where a negotiable document of title has been indorsed in blank or to bearer, any holder may indorse the same to himself or to any other specified person, and in such case the document shall thereafter be negotiated only by the indorsement of such indorsee.

Negotiation of Negotiable Documents by Indorsement.—

A negotiable document of title may be negotiated by the indorsement of the person to whose order the goods are by the terms of the document deliverable. Such indorsement may be in blank, to bearer or to a specified person. If indorsed to a specified person, it may be again negotiated by the indorsement of such person in blank, to bearer or to another specified person. Subsequent negotiation may be made in like manner.

Transfer of Negotiable Document without Indorsement.—

Where a negotiable document of title is transferred for value by delivery, and the indorsement of the transferor is essential for negotiation, the transferee acquires a right against the transferor to compel him to indorse the document unless a contrary intention appears. The negotiation shall take effect as of the time when the indorsement is actually made.

Transfer of Non-Negotiable Documents.—

A document of title which is not in such form that it can be negotiated by delivery may be transferred by the holder by delivery to a purchaser or donee. A non-negotiable receipt cannot be negotiated and the indorsement of such a receipt gives the transferee no additional right.

Negotiable Documents of Title Marked "Not Negotiable."—

If a document of title which contains an undertaking by a carrier, warehouseman or other bailee to deliver the goods to the bearer, to a specified person or order, or to the order of a specified person, or which contains words of like import, has placed upon it the words "not negotiable," "non-negotiable" or the like, such a document may nevertheless be negotiated by the holder and is a negotiable document of title within the meaning of this act. But nothing in this act contained shall be construed as limiting or defining the effect upon the obligation of the carrier, warehouseman, or other bailee issuing a document of title of placing thereon the words "not negotiable," "non-negotiable," or the like.

Who May Negotiate a Document.—

A negotiable document of title may be negotiated—

(a) By the owner thereof, or

(b) By any person to whom the possession or custody of the document has been entrusted by the owner, if, by the terms of the document the bailee issuing the document undertakes to deliver the goods to the order of the person to whom the possession or custody of the document has been entrusted, or if at the time of such entrusting the document is in such form that it may be negotiated by delivery.

Rights of Person to Whom Document Has Been Negotiated.—

A person to whom a negotiable document of title has been duly negotiated acquires thereby,

(a) Such title to the goods as the person negotiating the document to him had or had ability to convey to a purchaser in good faith for value and also such title to the goods as the person to whose order the goods were to be delivered by the terms of the document had or had ability to convey to a purchaser in good faith for value, and

(b) The direct obligation of the bailee issuing the document to hold possession of the goods for him according to the terms of the document as fully as if such bailee had contracted directly with him.

Rights of Person to Whom Document Has Been Transferred.—

A person to whom a document of title has been transferred, but not negotiated, acquires thereby, as against the transferor, the title to the goods, subject to the terms of any agreement with the transferor.

If the document is non-negotiable, such person also acquires the right to notify the bailee who issued the document of the transfer thereof, and thereby to acquire the direct obligation of such bailee to hold possession of the goods for him according to the terms of the document.

Prior to the notification of such bailee by the transferor or transferee of a non-negotiable document of title, the title of the transferee to the goods and the right to acquire the obligation of such bailee may be defeated by the levy of an attachment or execution upon the goods by a creditor of the transferor, or by a notification to such bailee by the transferor or a subsequent purchaser from the transferor of a subsequent sale of the goods by the transferor. (Uniform Sales Act.)

DELIVERY OF BILL OF LADING.—Delivery and acceptance of the bill of lading constitute a delivery of the goods and a vesting of the title in the buyer. (*Cohen* v. *Curtin*, 177 N. Y. S. 246.)

Indorser Not a Guarantor.—

The indorsement of a document of title shall not make the indorser liable for any failure on the part of the bailee who issued the document or previous indorsers thereof to fulfill their respective obligations. (Uniform Sales Act.)

PERFORMANCE OF CONTRACT.—

Seller Must Deliver and Buyer Accept Goods.—

It is the duty of the seller to deliver the goods, and of the buyer to accept and pay for them, in accordance with the terms of the contract to sell or sale. (Uniform Sales Act.)

F. o. b.—In sales made, f. o. b. at a given point means, "Free on board" railroad or ship at that place. The seller is under obligation to deliver the goods at his expense and title does not pass until the goods are so delivered. The carrier is the agent of the buyer.

Goods Ordered at Distant Places.—Where goods are ordered from a seller at a distant place the intention of the parties controls. Generally title passes on delivery of the goods to the common carrier. But if the seller takes the bill of lading in his own name, title is retained until the bill of lading is indorsed to the buyer.

C. o. d. Sales.—In sales, cash on delivery, most courts hold that title passes to the buyer when the subject matter is delivered to the common carrier but that the buyer is not entitled to possession until the price is paid.

Sales Subject to Approval.—In sales subject to approval title does not pass until the conditions precedent, which are examination and approval, are completed.

Goods to be Manufactured.—In a contract of sale of goods to be manufactured, title does not pass until after the goods are in a deliverable state.

Sale by Sample or Description.—Where goods are sold by description or sample, title passes when they are applied to the contract and put in a deliverable condition.

Stolen Goods.—A thief cannot convey title to goods and a person buying goods from one having larcenous possession not alone gets no title but is also liable for their conversion if he has disposed of them. (*Reichard* v. *Hutton*, 142 N. Y. S. 935.)

Goods Obtained by Fraud.—Where a seller has voluntarily parted with the title to goods to the buyer as a result of fraud on the part of the buyer, an innocent second purchaser obtains a good title and will be protected. (*Phelps* v. *McQuade*, 158 App. Div. [N. Y.] 528.)

PLACE, TIME AND MANNER OF DELIVERY.—The Uniform Sales Act provides for the place, time and manner of delivery as follows:

Intention of Parties.—

Whether it is for the buyer to take possession of the goods or for the seller to send them to the buyer is a question depending in each case on the contract, express or implied, between the parties.

Place of Delivery.—

Apart from any such contract, express or implied or usage of trade to the contrary, the place of delivery is the seller's place of business if he have one, and if not his residence; but in case of a contract to sell or a sale of specific goods, which to the knowledge of the parties when the contract or the sale was made were in some other place, then that place is the place of delivery.

Time to Send.—

Where by a contract to sell or a sale the seller is bound to send the goods to the buyer, but no time for sending them is fixed, the seller is bound to send them within a reasonable time.

Goods in Possession of Third Parties.—

Where the goods at the time of sale are in the possession of a third person the seller has not fulfilled his obligation to deliver to the buyer unless and until such third person acknowledges to the buyer that he holds the goods on the buyer's behalf; but as against all others than the seller the buyer shall be regarded as having received delivery from the time when such third person first has notice of the sale. Nothing in this section, however, shall affect the operation of the issue or transfer of any document of title to goods.

Time of Delivery.—

Demand or tender of delivery may be treated as ineffectual unless made at a reasonable hour. What is a reasonable hour is a question of fact.

Unless otherwise agreed, the expenses of and incidental to putting the goods into a deliverable state must be borne by the seller.

Delivery in Instalments.—

Unless otherwise agreed, the buyer of goods is not bound to accept delivery thereof by instalments.

Where there is a contract to sell goods to be delivered by stated instalments, which are to be separately paid for, and the seller makes defective deliveries in respect of one or more instalments, or the buyer neglects or refuses to take delivery of or pay for one or more instalments, it depends in each case on the terms of the contract and the circumstances of the case, whether the breach of contract is so material as to justify the injured party in refusing to proceed further and suing for damages for breach of the entire contract, or whether the breach is severable, giving rise to a claim for compensation, but not to a right to treat the whole contract as broken.

Payments for Partial Deliveries.—Where the contract requires the purchaser to pay for each shipment of an instalment contract of sale and he deliberately violates the requirement his conduct is a breach of the agreement which will justify the seller in refusing to make any further deliveries under the contract. (*Marrone* v. *Engel*, 171 N. Y. S. 47.)

Delivery of Wrong Quantity (Uniform Sales Act).—

Where the seller delivers to the buyer a quantity of goods less than he contracted to sell, the buyer may reject them, but if the buyer accepts or retains the goods so delivered, knowing that the seller is not going to perform the contract in full, he must pay for them at the contract rate. If, however, the buyer has used or disposed of the goods delivered before he knows that the seller is not going to perform his contract in full, the buyer shall not be liable for more than the fair value to him of the goods so received.

Where the seller delivers to the buyer a quantity of goods larger than he contracted to sell, the buyer may accept the goods included in the contract and reject the rest, or he may reject the whole. If the buyer accepts the whole of the goods so delivered he must pay for them at the contract rate.

Where the seller delivers to the buyer the goods he contracted to sell mixed with goods of a different description not included in the contract, the buyer may accept the goods which are in accordance with the contract and reject the rest, or he may reject the whole.

The provisions of this section are subject to any usage of trade, special agreement, or course of dealing between the parties.

Reservation of Right of Possession or Property when Goods are Shipped (Uniform Sales Act).—

Where there is a contract to sell specific goods, or where goods are subsequently appropriated to the contract, the seller may, by the terms of the contract or appropriation, reserve the right of possession or property in the goods until certain conditions have been fulfilled. The right of possession or property may be thus reserved notwithstanding the delivery of the goods to the buyer or to a carrier or other bailee for the purpose of transmission to the buyer.

Where goods are shipped, and by the bill of lading the goods are deliverable to the seller or his agent, or to the order of the seller or of his agent, the seller thereby reserves the property in the goods. But if, except for the form of the bill of lading, the property would have passed to the buyer on shipment of the goods, the seller's property in the goods shall be deemed to be only for the purpose of securing performance by the buyer of his obligations under the contract.

Where goods are shipped, and by the bill of lading the goods are deliverable to the order of the buyer or of his agent, but possession of the bill of lading is retained by the seller or his agent, the seller thereby reserves a right to the possession of the goods as against the buyer.

Where the seller of goods draws on the buyer for the price and transmits the bill of exchange and bill of lading together to the buyer to secure acceptance or payment of the bill of exchange, the buyer is bound to return the bill of lading if he does not honor the bill of exchange, and if he wrongfully retains the bill of lading he acquires no added right thereby. If, however, the bill of lading provides that the goods are deliverable to the buyer or to the order of the buyer, or is indorsed in blank, or to the buyer by the consignee named therein, one who purchases in good faith, for value, the bill of lading, or goods from the buyer will obtain the property in the goods, although the

bill of exchange has not been honored, provided that such purchaser has received delivery of the bill of lading indorsed by the consignee named therein, or of the goods, without notice of the facts making the transfer wrongful.

Delivery to a Carrier on Behalf of the Buyer (Uniform Sales Act).—

Where, in pursuance of a contract to sell or a sale, the seller is authorized or required to send the goods to the buyer, delivery of the goods to a carrier, whether named by the buyer or not, for the purpose of transmission to the buyer is deemed to be a delivery of the goods to the buyer, except shipments f. o. b. destination.

Unless otherwise authorized by the buyer, the seller must make such contract with the carrier on behalf of the buyer as may be reasonable, having regard to the nature of the goods and other circumstances of the case. If the seller omit so to do, and the goods are lost or damaged in course of transit, the buyer may decline to treat the delivery to the carrier as a delivery to himself, or may hold the seller responsible in damages.

Unless otherwise agreed, where goods are sent by the seller to the buyer under circumstances in which the seller knows or ought to know that it is usual to insure, the seller must give such notice to the buyer as may enable him to insure them during their transit, and, if the seller fails to do so, the goods shall be deemed to be at his risk during such transit.

Right to Examine the Goods (Uniform Sales Act).—

Where goods are delivered to the buyer, which he has not previously examined, he is not deemed to have accepted them unless and until he has had a reasonable opportunity of examining them for the purpose of ascertaining whether they are in conformity with the contract.

Unless otherwise agreed, when the seller tenders delivery of goods to the buyer, he is bound, on request, to afford the buyer a reasonable opportunity of examining the goods for the purpose of ascertaining whether they are in conformity with the contract.

Where goods are delivered to a carrier by the seller, in accordance with an order from or agreement with the buyer, upon the terms that the goods shall not be delivered by the carrier to the buyer until he has paid the price, whether such terms are indicated by marking the goods with the words "collect on delivery," or otherwise, the buyer is not entitled to examine the goods before payment of the price in the absence of agreement permitting such examination.

What Constitutes Acceptance (Uniform Sales Act).—

The buyer is deemed to have accepted the goods when he intimates to the seller that he has accepted them, or when the goods have been delivered to him, and he does any act in relation to them which is inconsistent with the ownership of the seller, or when, after the lapse of a reasonable time, he retains the goods without intimating to the seller that he has rejected them.

Acceptance of Part.—A purchaser has no right to accept part and reject the rest of an entire contract of sale. (*Beilman* v. *Goldstein*, 172 N. Y. S. 334.) Acceptance of part of a contract which is indivisible is deemed acceptance of the entire contract. (*Felsteiner-O'Connell Shoe Co.* v. *Levy*, 185 N. Y. S. 899.)

Buyer is not Bound to Return Goods Wrongly Delivered (Uniform Sales Act).—

Unless otherwise agreed, where goods are delivered to the buyer, and he refuses to accept them, having the right so to do, he is not bound to return them to the seller, but it is sufficient if he notifies the seller that he refuses to accept them.

DEFAULT OF BUYER.—

When and How Resale May be Made (Uniform Sales Act).—

Where the goods are of a perishable nature, or where the seller expressly reserves the right of resale in case the buyer should make default, or where the buyer has been in default in the payment of the price an unreasonable time, an unpaid seller having a right of lien or having stopped the goods *in transitu* may resell the goods. He shall not thereafter be liable to the original buyer upon the contract to sell or the sale or

for any profit made by such resale, but may recover from the buyer damages for any loss occasioned by the breach of the contract or the sale.

When Right of Lien May be Exercised (Uniform Sales Act).—

1. The unpaid seller of goods who is in possession of them is entitled to retain possession of them until payment or tender of the price in the following cases, namely:
(a) Where the goods have been sold without any stipulation as to credit.
(b) Where the goods have been sold on credit, but the term of credit has expired.
(c) Where the buyer becomes insolvent.

2. The seller may exercise his right of lien notwithstanding that he is in possession of the goods as agent or bailee for the buyer.

Definition of Unpaid Seller (Uniform Sales Act).—

The seller of goods is deemed to be an unpaid seller within the meaning of this act—
When the whole of the price has not been paid or tendered;
When a bill of exchange or other negotiable instrument has been received as conditional payment, and the condition on which it was received has been broken by reason of the dishonor of the instrument, the insolvency of the buyer, or otherwise.

GOOD FAITH REQUIRED IN RE-SALE.—"A vendor's right of resale must be exercised in good faith and at such time, by such methods and under such circumstances as are most likely to produce the fair value of the property, and he (the vendor) has the burden of showing that it was so exercised." (*Woodward* v. *Tyng*, 123 Md. 98.)

When Seller May Rescind Contract or Sale (Uniform Sales Act).—

Where the goods have not been delivered to the buyer, and the buyer has repudiated the contract to sell or sale, or has manifested his inability to perform his obligations thereunder, or has committed a material breach thereof, the seller may totally rescind the contract or the sale by giving notice of his election so to do to the buyer.

ACTIONS FOR BREACH OF THE CONTRACT.—

Remedies of the Seller—Action for the Price (Uniform Sales Act).—

1. Where, under a contract to sell or a sale, the property in the goods has passed to the buyer, and the buyer wrongfully neglects or refuses to pay for the goods according to the terms of the contract or the sale, the seller may maintain an action against him for the price of the goods.

2. Where, under a contract to sell or a sale, the price is payable on a day certain, irrespective of delivery or of transfer of title, and the buyer wrongfully neglects or refuses to pay such price, the seller may maintain an action for the price, although the property in the goods has not passed, and the goods have not been appropriated to the contract. But it shall be a defense to such an action that the seller at any time before judgment in such action has manifested an inability to perform the contract or the sale on his part or an intention not to perform it.

3. Although the property in the goods has not passed, if they cannot readily be resold for a reasonable price, the seller may offer to deliver the goods to the buyer, and, if the buyer refuses to receive them, may notify the buyer that the goods are thereafter held by the seller as bailee for the buyer. Thereafter the seller may treat the goods as the buyer's and may maintain an action for the price.

Remedies of the Buyer—Action for Converting or Detaining Goods (Uniform Sales Act).—

Where the property in the goods has passed to the buyer and the seller wrongfully neglects or refuses to deliver the goods, the buyer may maintain any action allowed by law to the owner of goods of similar kind when wrongfully converted or withheld.

Action for Failing to Deliver Goods (Uniform Sales Act).—

1. Where the property in the goods has not passed to the buyer, and the seller wrongfully neglects or refuses to deliver the goods, the buyer may maintain an action against the seller for damages for non-delivery.

Remedies for Breach of Warranty (Uniform Sales Act).—1. Where there is a breach of warranty by the seller, the buyer may, at his election—

(a) **Accept or keep the goods** and set up against the seller, the breach of warranty by way of recoupment in diminution or extinction of the price.

(b) **Accept or keep the goods** and maintain an action against the seller for damages for the breach of warranty.

(c) **Refuse to accept the goods,** if the property therein has not passed, and maintain an action against the seller for damages for the breach of warranty.

(d) **Rescind the contract** to sell or the sale and refuse to receive the goods, or if the goods have already been received, return them or offer to return them to the seller and recover the price or any part thereof which has been paid.

2. When the buyer has claimed and been granted a remedy in any one of these ways, no other remedy can thereafter be granted.

3. Where the goods have been delivered to the buyer, he cannot rescind the sale if he knew of the breach of warranty when he accepted the goods, or if he fails to notify the seller within a reasonable time of the election to rescind, or if he fails to return or to offer to return the goods to the seller in substantially as good condition as they were in at the time the property was transferred to the buyer. But if deterioration or injury of the goods is due to the breach of warranty, such deterioration or injury shall not prevent the buyer from returning or offering to return the goods to the seller and rescinding the sale.

4. Where the buyer is entitled to rescind the sale and elects to do so, the buyer shall cease to be liable for the price upon returning or offering to return the goods. If the price or any part thereof has already been paid, the seller shall be liable to repay so much thereof as has been paid, concurrently with the return of the goods, or immediately after an offer to return the goods in exchange for repayment of the price.

5. Where the buyer is entitled to rescind the sale and elects to do so, if the seller refuses to accept an offer of the buyer to return the goods, the buyer shall thereafter be deemed to hold the goods as bailee for the seller, but subject to a lien to secure the repayment of any portion of the price which has been paid, and with the remedies for the enforcement of such a lien allowed to an unpaid seller.

6. The measure of damages for breach of warranty is the loss directly and naturally resulting, in the ordinary course of events, from the breach of warranty.

7. In the case of breach of warranty of quality, such loss, in the absence of special circumstances showing proximate damage of a greater amount, is the difference between the value of the goods at the time of delivery to the buyer and the value they would have had if they had answered to the warranty.

Conditional Sales

DEFINITION.—A conditional sale is a sale on condition that the title shall not pass until the happening of an event, generally the payment of the price. (*Roach* v. *Curtis,* 191 N. Y. 387.)

INTEREST OF PARTIES.—The purchaser becomes the legal owner of the property, title to which vests in him subject to being divested upon his failure to fulfil the conditions of the sale.

DEFAULT OF CONDITION.—On default of the condition by the purchaser, the absolute title in the property revests in the vendee subject to the rights accorded him under the statute.

DISTINCTIVE FEATURES.—The distinctive features of a conditional sale are:

1. Title remains in seller.
2. Possession is generally held by the purchaser.
3. Title passes to purchaser on complying with the conditions of the sale.

RECORDING.—Most states have passed statutes requiring the recording of conditional sales agreements. "The reason for the enactment of the law providing for the filing of contracts for conditional sales was to protect those purchasing in good faith articles from those apparently having the title to the same as evidenced by their possession." (*Groves Elevator Co.* v. *Callanan*, 11 App. Div. [N. Y.] 301.)

EACH SALE MUST BE RECORDED.—The statutes being modifications of the common law, they must be construed strictly. The statutes contemplate the making and filing of each separate contract of sale and do not contemplate a general agreement in advance to cover all future sales. (*Scherl* v. *Flam*, 129 App. Div. [N. Y.] 561.)

PLACE OF RECORDING.—The statutes as a rule indicate the place where conditional sales are to be filed. This is generally with the clerk of the county where the vendee resides if he resides within the state and if not then in the county where the goods are situated.

RECOVERY OF PAYMENTS.—In a number of states the statutes provide that where the vendor retakes property sold under a conditional sales agreement the vendee may recover the sums which he has paid on the contract.

"The obvious purpose of the Legislature in enacting the statute governing conditional sales was to protect purchasers on the instalment plan from the oppression of unconscionable dealers, to prevent the forfeiture of considerable sums paid on account by reason of the default in the payment of a small instalment. The statute was wise and salutary, enacted in response to public sentiment aroused by many instances of harsh and brutal conduct perpetuated upon people quite helpless to protect themselves. Intended to be a shield against harsh and unfair conduct in strictly enforcing the technical requirements of such contract, it never was intended to be used as a sword to enforce harsh and technical requirements." (*Nyboe* v. *Doll & Sons, Inc.*, 167 App. Div. [N. Y.] 225.)

UNIFORM CONDITIONAL SALES LAW.—The following states have adopted the Uniform Conditional Sales Law:

Arizona, 1919	New Jersey, 1919	West Virginia, 1921
Delaware, 1919	New York, 1922	Wisconsin, 1919
Nebraska, 1921	South Dakota, 1921	

Patents

WHO MAY OBTAIN A PATENT.—Under section 4886 of the Revised Statutes of the United States, a patent may be obtained by any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter or any new and useful improvements thereof, not known or used by others in this country before his invention or discovery thereof, and not patented or described in any printed publication in this or any other country, upon making proper application and paying the required fees to the United States Patent Office. Under the statute a patent may be issued to

aliens as well as to citizens. In case of the death of the applicant the patent is issued to his representative.

RIGHTS UNDER A PATENT.—The interests of the public are the primary considerations, and to these the privilege granted by patents to inventors are secondary and subordinate. (*Warner* v. *Smith*, 13 App. Div. [D. C.] 111.)

The inventor is entitled to all the uses to which his invention can clearly be put, no matter whether he had conceived the idea of the use or not. (*Rossell* v. *Allen*, 16 App. Div. [D. C.] 559.) An inventor cannot be deprived of the right to his invention when he has used due diligence in the assertion of his right through compliance with the patent law procedure, except by contract or by a course of conduct which gives rise to an implication of an intention to part with or dispose of the right. (*Sendelbach* v. *Gillette*, 22 App. Div. [D. C.]109.)

WHAT MAY BE PATENTED.—Patents will be granted for inventions covering new and useful arts, machinery, manufacture or composition of matter or any new and useful improvements of them complying with the statutory requirements set forth in part in paragraph one of this section.

CLASSIFICATION OF PATENTS.—**Mechanical patents** are those covering machinery, engines or mechanical contrivances of all descriptions. **Process patents** cover methods in manufacture or industry in general, such as a method of extracting copper or gold from ores by a chemical process. **Composition patents** cover any patentable physical or chemical combination of matter such as a chemical compound. **Design patents** may be obtained for any new, original or ornamental design for an article of manufacture.

PATENTABILITY.—An invention to be patentable must extend into the domain of original thought, although the extent of the mental process is immaterial. It must, however, extend beyond the merely novel and useful. (*In re Snyder*, 10 App. Div. [D. C.] 140.)

Novelty is a question considered in patentability. A device, which is of superior utility over other devices and which has gone into general use even to the displacement of other devices, is not patentable unless it possesses novelty. (*In re Smith*, 14 App. Div. [D. C.] 181.)

Anticipation.—A patent will not be issued for an improvement which is merely a new application of knowledge already possessed by those skilled in the arts and industry and which is merely an adaptation or variation of a previous invention or discovery. (*In re Klemm*, 21 App. Div. [D. C.] 186.)

Combination.—The addition of one well known process to another does not in itself constitute a patentable invention unless some different or better result is produced than that which had been previously obtained. (*Mond* v. *Duell*, 16 App. Div. [D. C.] 351.)

Analogous Use.—A method of applying an old device or process to a similar or analogous subject with no change in the manner of application, with a result that is not substantially distinct in its nature, is not patentable, even though its new form of result had not been contemplated previously. (*Miller* v. *Allen*, 27 App. Div. [D. C.] 70.)

Double Use.—A patent will not be granted upon the discovery of a new and analogous function or use of an old machine. (*In re McNeil*, 82 App. Div [D. C.] 461.)

Substitution of Elements.—Not every new and useful improvement produced by the adaptation or substitution of some well known material for another will entitle a party to a patent. The improvement must be the result of invention. (*In re Cheneau*, 5 App. Div. [D. C.] 197.)

Substitution of Equivalents.—The substitution of one ingredient for another in a composition will not avoid infringement if the two ingredients were well known at the date of its patent as endowed with the same capacity. (*Lane* v. *Levi*, 21 App. Div. [D. C.] 168.)

An adaptation or extension of an original idea which was patented, or a new and more extended use of it which may involve only a change of form, proportions, or degree, by the substitution of equivalents, thereby doing the same thing as the original invention in a better way, is not such an invention as can be patented. Only an invention of that which is new and of practical utility, and not obtained by comparative superiority or greater excellence in that which was already known, is protected by the law as the exclusive property secured by a patent right. (*In re Iwan*, 17 App. Div. [D. C.] 566.)

Operativeness.—To obtain a patent the machine or method must operate. A claim cannot be regarded as patentable where it is lacking in one of the elements or steps which in accordance with the statement of the invention is essential to carrying out the alleged process or operation of the machine. (*In re Creveling*, 25 App. Div. [D. C.] 530.)

Many inventions are originally extremely crude, nevertheless if they operate they are patentable and their subsequent improvements in operation are covered by their original patent. (*Fowler* v. *Dodge*, 14 App. Div. [D. C.] 477.)

Processes.—"From the authorities it may be deduced: **first,** that processes involving a chemical or other elemental action, if new and useful, are patentable; **second,** that a process which amounts to no more than the function of a machine is not patentable; **third,** that a process or method of a mechanical nature not absolutely dependent upon a machine, although perhaps best illustrated by mechanism, may, if new and useful, be the proper subject of a patent, even though it involves no chemical or other elemental action." (*In re Weston*, 17 App. Div. [D. C.] 431.)

PROCEDURE TO OBTAIN PATENTS.—The United States Patent Office at Washington, D. C., publishes for gratuitous distribution rules of practice relating to the issuance of patents. In view of the technicalities of patent office practice, the observance of the rules and forms as well as the employment of attorneys versed in patent practice is recommended.

PATENT OFFICE RULES.—

Correspondence.—All communication and business with the United States Patent Office must be carried on in writing through the Commissioner of Patents.

Secretness.—All papers and matters connected with a patent application are kept secret until a patent is finally granted.

Deals with One Person Only.—The patent office usually deals with only one person at a time in any given application and all correspondence is with the one person, either the attorney, the inventor, or his assignee.

Attorneys.—The patent office advises applicants to select a competent attorney to represent them in patent cases. The value of many patents depends upon their skilful presentation and careful preparation of specifications and claims.

Power of Attorney.—This, made out in due form, should be given to the attorney. Thereafter the patent office will recognize only the attorney in the case.

Preliminary Search.—This consists of a search of the records of the patent office to determine whether or not a patent has been issued for a particular matter. The fee for such a search is small, generally about $10, and is desirable if an applicant wishes to avoid the payment of a filing fee of $20 and the costs for legal services in the preparation of the application, specifications, claims, etc., which may vary from $50 to over $1,000, depending on the nature of the case.

APPLICATIONS.—A complete application consists of:

1. Petition.
2. Specification.
3. Oath.
4. Drawings.
5. Government fee of $20, called the filing fee.

When a patent is issued a final government fee of $20 is due. It is payable within 6 months after the patent is allowed. Attorney's fees vary and may be anything from $50 up, depending on the nature of the case.

PETITION.—The petition must:

1. Set forth the name, residence and post office address of the petitioner.
2. Request specifically the grant of a patent.
3. Designate the title of the invention.
4. Refer to the specifications and drawings if necessary for full description and claims of the inventor which must be signed by the applicant.

Any omission will result in delay until corrected.

Specifications must set forth clearly and precisely the invention for which a patent is solicited, explain the principles of it and make distinct claims as to which is the most important part.

Complete specification consists of:

1. Preamble stating the name and residence of the applicant and title of the invention.
2. General statement of the object and nature of the invention.
3. Brief description of the several views of the drawings, if the invention requires such drawings.
4. Detailed description.
5. Claim or claims.
6. Signature of the inventor.
7. Signature of two witnesses.

OATH OR AFFIRMATION OF THE INVENTOR.—The inventor must set forth under oath or affirmation:

1. Of what country he is a citizen.
2. Where he resides.
3. Whether he is the sole or joint inventor of the invention claimed.
4. That he believes himself the first inventor of the invention in question
5. That he does not know or believe the invention was ever known or used before his invention or discovery, or
   (a) Patented or described in any printed publication in any country before his invention or discovery thereof, or
   (b) In public use or sale in the United States for more than two years prior to his application.
6. That the invention has not been patented in any foreign country and that no application has been filed by him or his legal representative

or assignee more than 12 months before his application in the United States.

INVENTOR'S CLAIMS.—The claims made by the inventor in his specifications are the most important part of his application because the patent when granted covers only what the inventor specifically claims.

Examination by Patent Office.—After making application and filing the required specifications, the patent office makes an examination as to the form and merits of the application. If defective in form, amendments may be made correcting the deficiencies. If defective on its merits the application will be rejected.

Rejection of Claims on Merits.—Some of the reasons why applications are rejected are: (1) lack of invention, novelty or utility; (2) prior public use or sale; (3) inoperativeness; (4) aggregation of elements or incomplete combination of elements; (5) where application is made for patent on improvement and application departs from invention originally disclosed or there is no identity with the original invention.

APPEALS.—Every applicant for a patent, whose claims were twice rejected on merits may file an appeal from the examiner-in-chief to the Commissioner of Patents. The government fee for such an appeal is $20. The attorney's fees depend on the nature of the case.

INTERFERENCES.—An interference is the technical name of a quasi judicial proceeding instituted by the Patent Office for the purpose of determining questions of priority of inventions between two or more applicants claiming the same invention. Interferences often involve highly technical matters and are generally expensive. Such proceedings will be ordered by the Patent Office in the following cases involving substantially the same invention:

1. Between two or more original applications.
2. Between an original application and an unexpired patent.
3. Between an original application and an application for the reissue of a patent granted during the pendency of the original application.
4. Between an original application and a reissue application when original applicant made the invention before the patentee's original application was filed.
5. Between two or more applications for the reissue of patents granted on application pending at the same time.
6. Between a reissue applicant and an unexpired patent.
7. Between an application for reissue of a later unexpired patent and an earlier unexpired patent granted before the original applicant of the later patent was filed.

ASSIGNMENT, MORTGAGE OR LICENSE OF PATENT.—Patents or any interest therein may be mortgaged, licensed or assigned in part or in their entirety. To be effective against third parties for value such conveyance must be recorded in the patent office within three months after it is made.

Infringement is a wrong committed by a person who uses, makes, or vends an article protected by the patent right of another.

Actions in infringement may be brought by the inventor or his assigns. Owners in common must sue jointly. A licensee cannot sue for infringement or grant sub-licenses.

Actions on patents are brought in the equity courts and generally consist of the following:

1. A temporary injunction restraining the defendant from using, making or selling the patented article pending trial of the action.
2. Permanent injunction if the plaintiff wins the suit.
3. Plaintiff can obtain damages, and is entitled to the profits made by the defendant by reason of his infringement.

NOTICE REQUIRED ON PATENTED ARTICLES.—A United States statute provides that it shall be the duty of all persons making articles under a patent to give notice to the public that it is patented, either by affixing the word "**patented,**" together with the date and year, or, if the article cannot be marked, then by having a label placed thereon or the container so marked.

Failure to so mark articles will make it impossible for the patentee to collect damages in any suit for infringement except on proof that the defendant was notified of the infringement and continued to use, make, or sell the articles after such notice.

LIABILITY FOR USE OF PATENTED ARTICLE NOT MARKED.—A patentee is under obligation to mark his articles "**patented.**" Where an infringer makes and sells such articles without marking "**patented**" the owner of the patent can bring an action against him for damages. If such articles are sold to innocent purchasers who have no knowledge of the patent rights they can nevertheless be held for damages to the patentee in an action by him.

PROTECTIVE CLAUSE IN CONTRACTS.—Contracts for work involving various kinds of products, such as buildings and construction work in general, should have a clause inserted therein that all patented articles should be clearly marked with the date of the patent, and should require the contractor to furnish a bond holding the owner of the building blameless in case of a suit arising by reason of use of patented articles not so marked.

FALSELY MARKING OR LABELING ARTICLE "PATENTED".—A United States statute provides that every person who in any manner marks upon anything made, used or sold by him for which he has not obtained a patent, the name, or any imitation of the name of any person who has obtained a patent therefor without the consent of such patentee or his assignee or legal representatives; or

Who in any manner marks upon or affixes to any such patented article the word "**patent**" or "**patentee**" or the words "**letters patents**" or any words of like import with intent to imitate or counterfeit the mark or device of the patentee, without having the license or consent of such patentee or his assigns or legal representatives; or

Who in any manner marks upon or affixes to any unpatented article the word "**patent**" or any word importing that the same is patented, for the purpose of deceiving the public,

Shall be liable for every such offense to a penalty of not less than one hundred dollars, with costs; one half of said penalty to the person who shall sue for the same and the other half to the use of the United States, within whose jurisdiction such offense may have been committed.

PENALTIES FOR INFRINGEMENT IN DESIGN CASES.—Penalty is $250, and where the total profit derived in any form from the use of such design exceeds $250 the defendant shall be liable for all profit above $250. Recovery is for the benefit of the owner of patent of the design and for his own use. These penalties are added to the other rights under the patent law.

TERMS AND COSTS OF PATENTS.—Issued for 17 years, not renewable,

Government fee on application	$20
" " " issue of patent	20
" " " appeals, when necessary:	
(1) From primary examiner to chief examiner	10
(2) From chief examiner to Commissioner of Patents	20
Attorney's fee	40 and upward
Drawings	5 " "

Trade-Marks

DEFINITION.—"A trade-mark may be tersely defined to be any sign, mark, symbol, word or words which indicate the origin or ownership of an article, as distinguished from its quality, and which others have not the equal right to employ for the same purpose. In its strictest sense, it is applicable only to a vendible article of merchandise to which it is affixed." (*Ball* v. *Broadway Bazaar*, N. Y. Ct. of Appeals, 87 N. E. 674.)

WHAT MAY BE USED AS A TRADE-MARK.—

A Mark to Designate Origin.—"A trade-mark which designates the time, origin, or ownership of the article manufactured or sold, will be protected, but words which have no other relation to the origin or ownership of the goods than merely to indicate the name or quality will not be protected." (*Lanabee* v. *Lewis*, 67 Ga. 561.)

Must Be Affixed or Imprinted on Article.—"Trade-marks, properly so-called, consist of some description or device in some way affixed to the article sold. That description or device may be either affixed to, or impressed upon the goods themselves by means of a stamp, or an adhesive label or ticket, or may be made to adhere to an envelope or case containing them." (*Singer Mfg. Co.* v. *Wilson*, 2 Ch.D. 434.)

Symbol or Mark.—The symbol or mark used in a trade-mark may be any arbitrary mark used to designate the origin of the goods, and may consist of letters, numerals, figures, words or combination of words.

WHAT CANNOT BE USED AS A TRADE-MARK.—

Merely Descriptive Words.—"The general proposition is well established that words which are merely descriptive of the character, qualities, or composition of an article, or of the place where it is manufactured or produced, cannot be monopolized as a trade-mark." (*Brown Chemical Co.* v. *Myer*, 139 U. S. 540.)

Geographical Name.—A geographical name used in its ordinary significance cannot be used as a trade-mark.

Name of a Private Person.—"It is hardly necessary to say that an ordinary surname cannot be appropriated as a trade-mark by any one person as against others of the same name who are using it for a legitimate purpose; although cases are not wanting of injunctions issued to restrain the use of one's own name where a fraud upon another is manifestly intended, or where he has assigned or parted with his rights to use it." (*Brown Chemical Co.* v. *Myer*, 139 U. S. 540.)

Mere Shape, Form or Substance.—"It is well settled that a person cannot obtain the monopoly incident to a trade-mark by the mere form of a vendible commodity that may be adopted." (*Adams* v. *Heisel*, 31 Fed. Rep. 279.)

Color.—No one can obtain exclusive rights by trade-mark to a certain color for any of his merchandise or containers. (*Faber* v. *Faber*, 49 Barb. [N. Y.] 357.)

Manner of Packing Goods.—"It has been too often reiterated to be now questioned, that under ordinary circumstances the adoption of packages of a peculiar form and color alone, having no distinguishing symbol, letter, sign, or seal, is not sufficient to constitute a trade-mark." (*Fisher* v. *Blank*, 138 N. Y. 244.)

Good Faith Essential in Trade-Marks.—The use of a name or term which is likely to deceive the public in reference to the component and nature of the article to which it is applied, will not be tolerated. (*Ginter* v. *Kinney Tobacco Co.*, 12 Fed. Rep. 782.)

Flag or Coat of Arms of United States, etc.—A simulation of a coat of arms of the United States or of any sovereign state or municipality cannot be registered as a trade-mark. (*William Connors Paint Mfg. Co. ex parte*, 119 O. G.2522.)

MATTERS NOT SUITABLE FOR TRADE-MARKS.—Immoral or scandalous matter cannot be used in a trade-mark.

Flag or coat of arms of any foreign country, or emblem of any fraternal organization or any simulation of them cannot be used as trade-marks.

Merely the **name of an individual, association, corporation, or firm** unless it is written, printed, woven or impressed in some distinctive manner.

No portrait of a living person without his consent in writing.

The **insignia of the American Red Cross.**

A design identical with or very similar to a registered or known trade-mark used by another.

LIMITATIONS OF TRADE-MARKS.—The right to use a trade-mark is not limited as to territory or point of time unless so stated; the right to use is co-extensive with the entire country and is perpetual. (*Kidd* v. *Johnson*, 100 U. S. 617.)

PROPERTY RIGHTS IN TRADE-MARKS.—"Property in trade-marks is not property in the words, letters, marks or symbols as things, or assigns of thought, or as products of the mind, like that of patent or copyright; but simply, and solely property as a means of designating things—the things thus designated being the production of human skill, or industry, whether of the mind, or the hands, or a combination of both; and this property has no existence apart from the thing designated, or separable from its actual use in accomplishing the present and immediate purpose of its being." (*Congress & Empire Spring Co.* v. *The High Rock Congress Spring Co.*, 57 Barb. [N. Y.] 526.)

UNFAIR TRADE.—"Unfair competition in trade, as distinguished from infringement of trade-marks, does not involve the violation of any exclusive right to the use of a word, mark or symbol. The word may be purely generic or descriptive, and the mark or symbol indicative only of style, size, shape, or quality, and as such open to public use like the adjectives of the language yet there may be unfair competition in trade by an improper use of such word mark or symbol." (*Dennison Mfg. Co.* v. *Thomas Mfg. Co.*, 94 Fed. Rep. 651.)

"The tendency of the courts at the present time seems to be to restrict the scope of the law applicable to technical trade-marks, and to extend its use in cases of unfair competition." (*Church & Dwight Co.* v. *Russ*, 99 Fed. Rep. 276.)

What Must be Shown to Sustain Unfair Trade.—"It has long been settled that in cases of unfair competition the action is based on deception, unfairness and fraud, and that this fraud should be generally proved and not left to inferential evidence alone. This rule is far more strictly followed in cases o

unfair competition than in cases involving a technical trade-mark, where fraud will be presumed from the wrongful use of the trade-mark, without regard to the intent. The United States courts have repeatedly held that the intent to deceive the public is an indispensable element in the fraud charged in unfair competition, and that this intent and the fraud in which it inheres may be, and generally must be, proved by circumstances, by facts, by sales, by a course of action." (*Daviess County Distilling Co.* v. *Martinoni*, 117 Fed. Rep. 186.)

APPLICATION FOR TRADE-MARK REGISTRATION.—Trade-marks are registered in the patent office. Certain technical formalities must be complied with in making application for the registration which should be left to an attorney skilled in such practice. Drawings of the trade-mark on bristol board of a certain size must also be submitted with the application.

LIFE OF REGISTRATION.—Trade-marks are registered for 20 years with the privilege of renewal on payment of the prescribed fee. Request must be made for renewal not more than 6 months before the expiration of the period of original issue.

Government Fees.—The fees, exclusive of those of the attorney, are as follows:

Application for registration	$10
" " renewal	10
Filing notice on opposition	10
Appeal from examiner in charge to Commissioner of Patents	15

PATENT OFFICE RULES.—The United States Patent Office at Washington, D. C., issues pamphlets giving the laws on trade-marks and the rules of the patent office. These may be obtained on application and instructions therein should be carefully followed.

Copyright

Copyright, under the act of Congress, gives an exclusive right to authors, compilers, designers, artists, etc., or their assigns, to publish and dispose of their productions during the statutory period of 28 years with the privilege under certain circumstances of renewing their copyright for another 28 years.

Copyright gives **exclusive right**

1. To print, publish and sell a copyrighted work.
2. To translate, dramatize, arrange and adapt.
3. To deliver lectures, sermons, etc., prepared for oral delivery.
4. To represent, make record of, exhibit or perform dramatic works.
5. To perform music and make any arrangement or setting of it.

Detailed information regarding the copyrights can be obtained in pamphlet form by applying to the **Copyright Office of the Library of Congress**, Washington, D. C. The pamphlet contains the copyright law and rules of the United States Supreme Court governing suits on copyrights and rules of the copyright office. Proper forms and blanks for copyright application are also sent on request.

WHAT MAY BE COPYRIGHTED.—

1. Books, including composite and cyclopedic works, dictionaries, gazetteers and other compilations.
2. Periodicals, including newspapers.
3. Lectures, sermons, addresses prepared for oral delivery.
4. Poems, dramatic or dramatico-musical compositions.
5. Musical compositions.
6. Maps.

7. Works of art, models or designs of works of art.
8. Reproductions of works of art.
9. Drawings or plastic works of a scientific or technical character.
10. Prints and pictorial illustrations.
11. Photographs.

WHAT CANNOT BE COPYRIGHTED.—

1. Blank books for carrying out any system of transacting business such as journals, diaries, account books.
2. Forms of contracts, leases, etc., not containing original copyrightable material.
3. Forms for use in legal, commercial or financial affairs, in whole or partly blank.
4. Puzzles, games, labels, wrappers or containers.
5. Advertisements or catalogs containing merely names, prices and places where articles can be purchased.
6. Stage, business or professional names.
7. A mere name of article of manufacture, substance or product.
8. Name, title or coined names.
9. Mere title as such, of any literary, musical, dramatic or artistic production.
10. Names or titles of newspapers or magazines.
11. Mere form of words or mottoes, phrases, catch words, riddles or any other similar combinations of words.

PROCEDURE TO OBTAIN COPYRIGHT.—

Application.—Proper blanks for application should be used and although the forms issued by the copyright office are not prescribed, their use is convenient. Each application must set forth the following facts, without which registration cannot be had:

1. Name and address of claimant of copyright.
2. Nationality of the author of the work.
3. Title of the work.
4. Name and address of person to whom certificate is to be issued and sent.
5. In works that are published, the actual date of publication, which means the year, month and day.

When Application Is Made.—Any work entitled to a copyright should be registered in the copyright office promptly after publication, by sending to that office the registration application properly filled out, a money order or equivalent for the registration fee and two complete copies of the best edition of the work. The law says "promptly" which has been defined as "without unnecessary delay." The very day of publication is not necessary but as soon thereafter as possible.

Notice.—To enable the holder of a copyright to bring action for infringement it is necessary to give notice of copyright. The ordinary form for books, periodicals, musical and dramatic productions is **"Copyright 1924 by John Jones."**

Name in Copyright.—The name appearing in the notice should be the name of a living person, his trade name, or the name of the company claiming to own the copyright. A pen name or pseudonym should not be used.

Certain Restrictions.—In order to secure a copyright certain works must be manufactured in the United States. Such works are books in the English

nguage, or in any language by a citizen or resident of the United States, ıcluding illustrations produced by a photographic process.

INFRINGEMENT OF COPYRIGHT.—A plaintiff in an infringement ction is entitled to relief as follows:

1. Injunction restraining further infringement.
2. Payment of damages that the proprietor has suffered and payment of profits earned by the infringer.
3. Delivery for impounding of all articles alleged to have infringed.
4. Delivery for destruction of all infringing copies as well as all plates which the defendant has, as the court may order.

TERM AND COST OF COPYRIGHT.—A copyright is issued for 28 years, enewable in some cases for 28 years more. The government's filing fee is $1.

Prints and Labels

Under certain conditions prints and labels **may be registered** and thereby ıe exclusive use of such labels and prints obtained.

DEFINITIONS.—A print is an artistic production, resulting from an intel-tual effort, and made for the purpose of being used with an article of trade ıd in some manner related to it as an advertisement.

A label is an artistic production stamped or impressed on the article of anufacture, or on a piece of paper which is attached to the article, or on its ntainer, for the purpose of identification.

REQUISITES FOR REGISTER.—A print or label to be registered must operly belong to an article of manufacture and be descriptive of such an ticle or the contents. Application for registration **must be filed before** ıblication.

TRADE-MARKS, PRINTS AND LABELS—DIFFERENTIATED.—A print label must be descriptive of the article to which it is attached whereas a trade-ark need not be. A print or label must be of an artistic nature whereas a trade-ark need not be. A print need not be attached to the article whereas a label ıd trade-mark must be so attached.

WHO MAY REGISTER PRINTS AND LABELS.—Prints and labels may registered by any citizen of the United States or subject of a country to ıich the United States has extended copyright privileges.

Application must be made of the Commissioner of Patents. The essentials ıd formalities to be complied with are:

1. Name of applicant.
2. Nationality.
3. Place of business.
4. Whether author or proprietor is applying.
5. Title of the print or label.
6. Name of article of manufacture for which the label or print is to be used.
7. Ten copies of the print or label.

Government fee is $6. The label is registered for 28 years with the privilege being renewed for another 28 years.

ASSIGNABILITY.—The rights under a registered label or print may be assigned; such assignment should set forth:

1. Name of the assignee and assignor.
2. Title of the print or label.
3. Date when application for registration was filed.
4. Date of registration.
5. Statement that a consideration was paid.
6. Date of signing.
7. Signatures and acknowledgment.

NOTICE AND INFRINGEMENT.—In order to maintain an action for infringement of a label or print it is necessary for the owner to have printed on each copy of the label or print the words, **"Registered U. S. Patent Office,"** or words to that effect.

SECTION 7

CAPITAL STRUCTURE AND POLICIES

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SECTION 7

CAPITAL STRUCTURE AND POLICIES

THREE PRINCIPAL PHASES OF CORPORATE FINANCE.—The problem f corporate finance may be divided into three parts. The first relates to the riginal capital requirements, the second deals with current operations, and the hird is concerned with the development of the business and resulting financial eeds.

Consideration of the **original capital requirements** of a concern deals with the itial capital needs, the methods of raising it, the kinds of securities which re to be issued, and how and where they are to be sold. Capital financing iso includes a consideration of how best to utilize the funds thus obtained, hich involves a proper allocation for plant, equipment and working capital.

Current financial operation involves all the financing incident to the con- inued operation of a business as well as the determination of profits and their llocation for the enlargement of working capital and increasing permanent apital investments, as well as their allocation to surplus, dividends, sinking nds, and various reserves.

The third phase of corporate financing is concerned with the **development f the business.** This involves the formulation of a financial plan and its ad- istments, as well as to the forecasting of the growth of the business and the aking of adequate financial provisions for such growth.

RELATION OF FINANCE AND ACCOUNTING.—Although finance and ccounting are closely related in the conduct of business, their functions are istinct and separate. Financing is essentially formulating and effectuating olicies of the financial management, and is concerned with the best methods f raising money, whether by bank borrowing, or by the sale of funded debt r capital stock, the kind of securities to be issued, if securities are to be sold, here and how they are to be sold and how the proceeds may be used to best dvantage in the business. It is primarily the function of the financial man- gement to anticipate the requirements of the business for additional capital nd to provide it as cheaply and satisfactorily as possible. Accounting, on he other hand, is concerned with recording and analyzing results that have een achieved in the business and drawing conclusions which are used in turn y the financial manager as a basis for conducting the finances.

FUNDAMENTAL RULES OF FINANCE.—The fundamental rules and prin- ples of finance in relation to the operation of a concern, which are applicable any form of business, whether incorporated or not, may be summarized as llows:

1. **Adequate capital.** This requires the utilization of all sources of capital, hether owned or borrowed, and may include, in addition to the initial capital, he reinvestment of accumulated earnings in the business.

2. **Proper proportion of owned and borrowed capital.** A concern should not

hesitate to obtain long-term loans to be used for capital purposes if such loans will enable it to carry on its business more effectively, and if such loans may be made more advantageously than stock can be sold. In determining the proper proportion of such loans due consideration must be given to their cost and also to the prospective earning power of the business, which should be adequate to insure the payment of fixed charges and to provide for the repayment of loans at maturity,—if a refunding operation is not anticipated for a portion of such loans.

3. **Intensive use of capital.** The turnover should be as rapid as is consistent with the nature of the business.

4. **Singleness of purpose.** The capital invested should be confined to profitable lines and the dissipation of capital in side lines and outside investments which are irrelevant and unnecessary to the business should be avoided.

5. **Preserving a well-balanced capital structure.** This involves a study of the proper ratios of current assets to capital assets, both to each other and to the sales volume.

6. **Keeping proper share of assets liquid.** Sufficient cash and readily convertible assets should be kept to meet current liabilities, and to seize such special opportunities and advantages as may be presented to the business from time to time.

7. **Retaining earnings.** To a large degree earnings should be "ploughed back" in the concern until the capital structure is such that subsequent distributions of earnings may be made without impairing the financial status of the company regularly and in proportion to the average earnings. This will avoid the necessity of "spotty" distributions, large in some years, small in others, and will serve to entitle the company's securities to an investment rating.

8. **Free use of earnings.** Earnings should be applied generously in necessary business maintenance and development but sparingly for non-essentials.

9. **Provision for adequate reserves.** Sufficient provision should be made for wasting assets and for business contingencies.

10. **Use of foresight in planning financial operations.** This involves ascertaining the sources of funds and their availability when needed. Some form of budgetary control is an important aid in planning and operating the finances of a business.

Corporate Promotion

PROMOTION DEFINED.—Promotion may be said to consist of **raising** capital necessary for launching a business by selling its securities or making the necessary arrangements for the sale of such securities.

"In a comprehensive sense 'promoter' includes those who undertake to form a corporation and to procure for it the rights, instrumentalities and capital by which it is to carry out the purposes set forth in its charter, and to establish it as fully able to do its business. Their work may begin long before the organization of the corporation, in seeking the opening for a venture and projecting a plan for its development and may continue after the incorporation by attracting the investment of capital in its securities and providing it with the commercial breath of life." (*Old Dom. Copper Min. etc. Co.* v. *Bigelow*, 203 Mass. 159.)

PROMOTERS.—Promoters are often classified as professional and occasional. **Professional promoters** are generally bankers but sometimes are large engineering firms or certain large industrial companies. These engineering

firms become actively engaged in financing, organizing, promoting, and sometimes in operating public utility companies. With such concerns promotion sometimes grows from a side line to one of their leading activities. Some of the larger manufacturing companies promote and finance new enterprises in order to obtain orders for equipment and generally operate through subsidiaries, which sell the securities of the companies they promote.

Occasional promoters may be found among lawyers, engineers, local bankers and business executives to whom opportunities come to develop local concerns and who are looked upon as the natural leaders in organizing local enterprises. Small companies are generally promoted in this way.

Very often **business executives,** particularly **financial executives,** are called upon to act as promoters. Instances have occurred where such executives have promoted industrial corporations and after the companies were organized and in operation, became managers or officers of the company. Frequently such promoters retain control.

BUSINESS EXECUTIVES ACTING AS PROMOTERS.—When business executives act as promoters they should watch the following points:

1. **Protect their own interest.** Many business executives do not recognize the legal significance of their capacity as promoters and fail to protect their own interests. An important distinction is whether they are acting as agent or principal of the enterprise promoted.

2. **When acting as agent** the promoter should protect himself by **a definite contract** setting forth what his compensation will be under different stages of the promotion, how and when payments are to be made, and what compensation he will be entitled to should the proposed promotion be abandoned. Without a definite and clearly defined contract, the promoter may find himself frozen out after he has given valuable information to his associates.

3. **When acting as principal** many business executives do not realize the amount of compensation to which they are entitled in promoting an enterprise, particularly if it is their first experience. As each promotion is governed by its own peculiar problems, specific suggestions cannot be made. In general, the promoter should retain for himself the equity in the business which remains after he has raised sufficient capital by the sale of bonds and stocks to operate the concern. That equity depends on the size of the corporation. Sometimes the promoter retains control.

4. **Sufficient capital** should be raised to operate the concern and pay for the promotion and organization expenses. A large part of such expenses are usually paid by the issue of common stock. Common stock is often used to pay the promoter.

5. **Long organization period.** Where the preliminary arrangements, investigation, assembling and organization necessary for the promotion of a concern extends over a long period of time, the sale of securities should be postponed until all of these steps are accomplished.

6. **Preliminary financing** may be necessary where the organization period is protracted. In such cases arrangements should be made with bankers or others to carry through the preliminary financing and to underwrite the securities of the concern when they are ready for issue.

LEGAL STATUS OF PROMOTERS.—The legal status of a promoter depends on the question whether he is acting as an independent person or as an agent or trustee for other interests in promoting the planned but as yet unincorporated corporation. In general, promoters hold a fiduciary relation to the subscribers of a proposed corporation and to the corporation when

formed. "This trust relationship is necessarily twofold: towards the corporation, as a separate legal entity in respect to corporate property, and towards the shareholder, in respect to his property right in his shares." (*Wills* v. *Nehalem Coal Co.*, 52 Ore. 70.)

Although a promoter may be paid a profit on his transactions, he cannot take secret and exorbitant profits at the expense of the proposed corporation he is promoting and to which he stands as a trustee.

VALUE OF THE PROMOTER.—The value of the promoter lies in the service he renders to the business community in discovering, formulating and assembling business propositions, thereby providing business activity on the one hand and avenues for investments on the other. "No enterprise of any importance can be inaugurated without the services of a capable promoter and organizer. He is the man who sees the opportunity, who can make others see it and believe in it, who organizes the plans and pushes them to completion." (R. E. Heilman, *Journal of Political Economy*, Nov. 1915.)

STAGES IN PROMOTION.—There are **four stages** in promotion:

1. **Preliminary investigation** of all details and aspects of the proposed enterprise.
2. **Organizing a plan** and securing a charter, etc.
3. **Assembling the enterprise** which involves securing options on various plants and companies.
4. **Financing the enterprise** which in large promotions requires the organization of a syndicate and in smaller companies the selling of the securities by the promoter himself.

INVESTIGATION.—The success or failure of the promotion depends largely upon the thoroughness and accuracy of the preliminary investigation which may cover a wide range of subjects with many variations governed by the nature of the enterprise. The investigation often inquires into the social, economic, financial and business conditions on the one hand, and technical engineering and construction problems on the other. Such investigations are generally **made by experts** in their respective fields of engineering, accounting, economics and law. It is not unusual for a report of such investigations to contain from 50,000 to 200,000 words of concise and digested information.

INVESTIGATION FOR INDUSTRIAL PROMOTION.—E. K. Chapman, President of the Hudson Trust Co. of New York, in a paper entitled "Initial Financing of an Enterprise," sets forth a number of points to be covered in investigating the desirability of promoting a manufacturing corporation, which is to take over either tangible property or such intangible assets as patents, copyrights and goodwill. These points which should receive careful consideration are presented as follows:

1. The validity of the patents, copyrights, and other **titles and rights,** or the soundness of the claim of goodwill.
2. Strength and dangers of present and potential **competition.**
3. Likelihood of securing for the new company the proper grade of **managerial talent.**
4. Sufficiency of **capital** and dependable resources. This should be enough, not merely to get along if everything goes well, but to include the expenses and losses of the early experimental stage, and to provide a safe margin for emergencies. It is generally not desirable to apply

for money a second time to the people who subscribed the original amount of capital stock.

5. The **par value** of the capital shares, which should be low if the appeal is to be made to small investors, and not less than $100 if the appeal is to be made to large investors.
6. The **contract between the corporation and the promoter.** The promoter should be reimbursed in cash for his actual cash expenditures, but the compensation for his services should be in the form of shares in the corporation.
7. Necessity of investing a large sum of capital in constructing a **plant** for manufacturing the proposed product. Ordinarily it is less risky to start by having the product manufactured under contract by outsiders or by assembling the parts which have been purchased or manufactured under contract.
8. Probability of securing capital from men with experience in similar lines of business or with special information.

INVESTIGATION FOR PUBLIC UTILITY PROMOTION.—In the field of public utilities, bankers have worked out certain standards which they use in their preliminary estimates of earnings based on certain probable **yearly receipts from each person** in the territory to be covered by the utility company. Some of these standards taken from "Promotion and Organization of Public Service Corporations," by L. R. Nash, of Stone & Webster, require that before public utilities can be promoted there must be shown that yearly receipts from each person in the territory covered by the proposed public utility will be approximately as follows:

Electric light and power companies	$3 to	$ 6	per capita
Gas companies	2 "	6 "	"
Electric street railways in small cities	4 "	5 "	"
Electric street railways in large cities	7 "	10 "	"
Interurban railways	6 "	10 "	"

The following digest of a description of the preliminary survey of an electric railway promotion is adapted from the New York *Analyst*, July 20, 1914:

The 25 or 30 banking houses in New York and vicinity specializing in financing electric railways, receive from 500 to 1,000 proposals a year to build new lines or purchase and rehabilitate old ones. The bankers, in considering the proposals submitted to them, consider first the political attitude of the state or city regarding public utilities. They have on file tabulated data regarding the political records and activities in each state. They consider next the United States census figures of population and statistics which indicate the rate of growth of the community.

After preliminary consideration by the bankers, the promoter is asked to pay the expenses and fees of an expert engineer, selected by the banking house, to make a preliminary survey of the proposed line. The engineer makes an examination and gives an approximate estimate of the cost of the right of way, construction and terminals. This preliminary estimate of cost of construction and operation is expected to come within 5% of the actual figures.

The banking house checks this preliminary report against its previous experience and adds to the cost of construction the carrying charges on investments before the proposed company begins to make a return on its capital. Sometimes they go as far as to obtain bids for the construction of power plants and the roads.

PROBABLE NET EARNINGS.—Bankers generally decline to take up the new proposition unless the preliminary estimate shows net earnings equal to

2½ times the interest charges on the bonds necessary to float it. The generally accepted figure for interurban roads is that each mile of track should earn a minimum of $5,000. Assuming operating costs are 60%, there is left $2,000 for net earnings, and if the construction cost is $25,000 per mile, provided by 5% bonds, the interest charges per mile are $1,250, which leaves a balance of $750 per mile for depreciation, unexpected losses and accidents.

PRELIMINARY ANALYSIS OF RAILROAD PROMOTION.—An idea of the information required of a preliminary analysis on railroad propositions, is indicated by the following questions put to a promoter of a proposed railroad 30 miles long passing through three prosperous villages and connecting a rich agricultural and lumber country with a port on the sea.

1. How much traffic is now hauled by existing transportation agencies in this region?
2. How much standing lumber will be made available for shipment by this new road?
3. What are the important markets for this lumber?
4. At what price can it probably be sold in these markets?
5. What, approximately, will be the cost of cutting and of hauling lumber to railroad and loading on cars?

(Answers to the above questions will give a basis for figuring the possible rates on lumber from the point of loading to the markets.)

6. Just how much rail and water traffic through "D" is in sight?
7. What advantages as a port for rail and water traffic will Port "D" have over competing ports?
8. What inducements can be offered which will lead to the diversion of traffic now moving through competing ports to the route through Port "D"?
9. At what rates does traffic now move through competing ports to and from the markets which the promoter hopes to reach by his proposed route?
10. What is the attitude of connecting rail and water lines? Will they be inclined to assist in the development of Port "D" or will they find it to their interest rather to discourage the growth of this port? (This is perhaps the most important question of all, for a short railroad, such as the promoter has in view, could scarcely exist, let alone thrive, unless it has the cordial co-operation of connecting lines.)
11. Assuming that connecting lines are friendly, what rate per ton-mile can the proposed railroad probably secure on through traffic?
12. What will be the exact cost of securing the right of way and constructing the proposed road?
13. What will be the cost of providing docks and other terminal facilities at Port "D"?
14. Do the above estimates contemplate providing a well-built, modern road, or rather a temporary construction which will have to be replaced later?
15. What will be the cost of equipment and of necessary supplies of all kinds?
16. Will it be possible to secure local subsidies or other assistance?
17. Does the promoter have banking connections on which he can rely for assistance in floating the securities of the proposed road?
18. Does the promoter know any capitalists who may be willing—provided satisfactory answers to all the above questions are given—to buy the stock issues of the proposed road?
19. Is the promoter able and willing to incur the expense that will be necessary to secure correct, dependable answers to all the above questions?

PROMOTION OF COMBINATIONS.—An analysis preliminary to the combination of going concerns should cover the following:

1. What is the financial history of each concern that is to be considered as a possible member of the combination? How long has it been in existence? Is its organization stable? Are its earnings increasing or decreasing? Are adequate depreciation and other reserves deducted before estimating profits? Is the plant and physical property in good condition?
2. Who are the men engaged in this industry who have shown the most enterprise and good judgment? Will they join in the proposed combination and work together on harmonious terms? Will it be necessary to give positions to incompetents or to make unfair concessions in order to influence men who are essential to the combination?
3. What, if any, advantages as a money maker will the proposed combination have over

the separate, independent concerns? Will the combination be in violation of any laws? Will it be necessary to raise prices or otherwise incur any unpopularity in order to secure larger profits? Is it possible to introduce more efficient methods into the management of the various plants without arousing undue hostility at the beginning?

4. Assuming that the combination is agreed to, what should be the financial plan of the proposed combination? Upon what basis can its securities be exchanged for the securities of the independent concerns? On what basis can other securities be underwritten and sold to the public? How much fresh capital will the combination need? Will there remain a block of securities sufficient to compensate all who took part in the promotion, for their respective risks and expenditures?

CAUSES OF FAILURE IN PROMOTIONS.—Some of the causes of failure in promoting enterprises which are known in themselves to be sound and profitable are as follows:

1. **Defective financial plan** in not providing for adequate capital requirements, not only for fixed capital but also for working capital, including the necessary expenses to sell the securities.
2. Failure to establish **close relations with a financial house** which will be of assistance in selling securities.
3. **Neglecting to comply with some legal requirement** or failure to obtain by contract, option or outright purchase some essential property.
4. Failure to ascertain all facts necessary before floating the enterprise, or failure correctly to interpret the facts obtained.

ESSENTIALS OF PROMOTION REQUIREMENTS.—The **first essential**, after a decision has been reached that the enterprise is sound and feasible, is that sufficient capital should be authorized and raised. In a large promotion, the services of a banking house should be secured which is willing to underwrite the sale of securities and where a long term intervenes between the period of original planning, construction and development, and the sale of securities, some preliminary financing may be necessary. In smaller propositions the sale of securities may be handled directly by the promoter, and generally should be postponed until the corporation is launched.

The second point to consider is for the promoter to protect his own interests by retaining for himself sufficient equity in the business to compensate him for his services and risk of initial capital in promoting the company. Sometimes in smaller promotions business executives fail to realize that full return should come to them for their services and the risk of their capital. They often put in their own money under precisely the same conditions as the money of other people who are interested. The promoter should protect himself with the greatest care and forethought if he is to reap a reward for his efforts, which may become fruitless after considerable expenditure of money, patience and diplomacy in securing options on companies, or otherwise assembling the proposition.

PROMOTER'S PROFITS.—Although the relation of trust exists between the promoter and his associates, he may, with entire propriety, profit by his connection with the corporation but such profits must be **open and above board** and must be of such a nature as to be compatible with his trust relations.

Although much has been said in condemnation of promoter's profits, the precarious nature of the business seems to justify large returns—first, because they are paid almost invariably in common stock of the company promoted, the value of which is usually entirely dependent on the ultimate success of the promotion; second, because the compensation is generally in proportion to the risk involved.

Promoters generally figure as their profits on whatever remains of the capitalized value of the company after it is financed. An illustration is as follows:

Illustration.—A promoter estimates that a manufacturing enterprise will earn, after completing a 2-year development period, more than $110,000 net profits yearly. He plans on creating securities salable at par on following basis:

Capitalization		Interest and Dividend Requirements
$ 500,000	7% first mortgage bonds	$ 35,000
250,000	Preferred stock	22,500
500,000	Common stock yielding 10%	50,000
$1,250,000		$107,500

Assume that the corporation needs $1,000,000 cash, and that expense of investigating, securing options, incorporating, and selling securities is $150,000. The promoter enters into a contract to turn over $1,000,000 cash, or possibly property and total assets for which he pays $1,000,000 in exchange for all bonds, preferred and common stock. He then sells bonds, preferred stock, and $250,000 common stock, and retains for himself $250,000, against which he offsets expenses, $150,000. His net profit, in form of common stock, is $100,000. Among conservative promoters it is a recognized principle that the promoter, to show his faith in the enterprise, should receive his compensation in common stock.

PROMOTER'S SECRET PROFITS AND OVERVALUATION.—As the promoter's relations to others in the enterprise are of a fiduciary nature requiring utmost confidence and trust, he must disclose any profits received by him. Otherwise he cannot retain them. Unusual profits obtained without the full knowledge of others interested with him are generally construed as illegal and may be recovered by either the corporation or the stockholders who bought the original issue of stock. Profits are generally considered illegal unless they have been obtained with the consent of a fully informed board of directors who had full knowledge of the entire transaction.

Recourse cannot be had against the promoter for overvaluation of the property if it is accepted by the corporation and stockholders with full knowledge of such overvaluation.

A promoter acquiring property before the inception of the company may dispose of it to the company at whatever profit he can secure. He must, however, disclose his own interest in the property and his offer must be made without misrepresentation.

The promoter's work requires patience and diplomacy, is expensive and hazardous, and may end without profit. A promoter must exercise a high degree of diplomacy in conciliating the various conflicting interests when he attempts to unite previously independent and sometimes competitive enterprises. To accomplish this several plans are feasible, but one which seems preferable is to make an outsider the chief official of the new company giving him free rein in the choice of subordinates. Another plan is to choose the chief executives from the companies to be combined, relying on their influence to forward his plans.

PROMOTION FAILURES.—Probably more than half of the really serious attempts at promotion result in failure due to the omission of some important phase in the investigation and estimate of income and expenses of the concerns involved.

Syndicates

DEFINITION.—A syndicate, which, in the eyes of the law, is classed as a joint venture, has been defined as "an association of individuals or a combination of companies united for the prosecution of some enterprise or scheme requiring large capital." (Standard Dictionary.) Among banking and security houses the term may generally be narrowed down to apply only to a group associated together for the purpose of purchasing and distributing a large block of securities to the public. Such a syndicate is sometimes referred to as a **joint account.** Where the term **underwriting** or **underwriting syndicate** is correctly used, it applies to a syndicate which agrees (or underwrites) to purchase all of an issue of securities which are unsubscribed by the individuals, generally stockholders, to whom they are originally offered.

The **primary purpose of a syndicate** is to relieve the corporation issuing securities of all risk connected with floating the issue. The corporation is assured a fixed sum of money within a given time, the syndicate undertaking to purchase the securities outright. The corporation thereby is enabled to proceed with its operation and is relieved of the problems of financing. The syndicate generally operates through investment bankers who assist the corporation in formulating its financial plan and advise it in regard to the form of stocks and bonds to be issued and other details connected with the flotation of security issues. The success of the enterprise, in so far as it relates to capital financing, is guaranteed by the syndicate which undertakes and is willing to market the issues.

STEPS IN SYNDICATE ORGANIZATION.—The various steps in syndicate organization may be summarized as follows:—

1. **The purchase syndicate,** which consists of a group of bankers who agree to purchase the entire security issue of the corporation.
2. **The syndicate manager,** designated to form the selling syndicate and manage its operations.
3. **The selling syndicate** which is made of a group of investment bankers who undertake to sell the securities to investors either through their own sales organizations or in conjunction with smaller investment bankers who reach the ultimate investors.

ORGANIZATION OF THE PURCHASE SYNDICATE.—The **original agreement** for the sale of securities is usually made between the corporation and a single banking house. If the issue is small, the banking house sells these securities direct, and if the issue large, it will undertake the formation of a syndicate of bankers to aid in selling the securities. The essential function of a syndicate is to distribute the risk among several banking houses and also to afford the banking houses a greater diversification of securities than would otherwise be possible.

In the financial district of New York there is a tacit understanding among bankers that they will join each other in syndicates, and when an invitation comes from one of the three or four leading houses, it is customary to participate in the syndicate. In this way billions of dollars worth of securities are disposed of.

The banker generally considers his services of a professional nature and will not undertake to underwrite an issue while negotiations are pending with another banking house. Therefore, a corporation purposing to secure a contract with one banking house, should break off all relations and negotiations with others before approaching it.

SYNDICATE MANAGEMENT.—The active management of a syndicate is carried on by the house which organizes it, which may impose such conditions as it deems fit to insure the flotation and distribution of the security issue. An **example of such an agreement** is set forth in the following illustration taken from the agreement of the United States Steel Syndicate:

J. P. Morgan and Company shall be sole managers of the syndicate, and in behalf of the syndicate they may make any and all arrangements, and may perform any and all acts, even though not herein provided for, in their opinion necessary or expedient to carry out the provisions of this agreement; or to promote or to protect what they deem to be the best interests of the syndicate. The enumeration of specific powers in this or any other article of this agreement, shall not be construed as in any way abridging the general powers of this article intended to be conferred upon or reserved to J. P. Morgan and Company.

COMPENSATION OF SYNDICATES.—The compensation of syndicates varies according to the credit and standing of the issuing company, the nature of the securities, and the financial conditions prevailing for the flotation of securities. Generally one syndicate buys the securities at one price and sells them to the next group (other bankers, selling syndicates or retailers) at a little more than the cost to them. The profits may vary from ½% to 10%, and in some cases even higher.

DETAILED DESCRIPTION OF SYNDICATE OPERATION.—The Harvard Business Review for Oct. 1924, gives the following description of syndicate operation:

"Among the general methods of distribution, the **selling syndicate** is the most common. By this method the risk of purchasing an issue from another company can be distributed among a number of other investment houses. In the case of large issues, or for a smaller issue which might appeal indifferently to investors and require a long period for sale, this method relieves the issuing house of the risk and expense involved in keeping its capital tied up for a long period.

"The issuing house, or small group of houses called the syndicate managers, makes up a **participation list** from the many retailers whose records it has on file and with whom it has had previous relations. A larger house, which may at other times also originate issues and with which relations are friendly and close, will be allotted large blocks in this list.

"In fulfilling the pure selling function of the syndicate, the retailer assumes liability for an amount of bonds equal to or larger than his **participation;** these he purchases and must sell. 'Participation' is only the amount to be guaranteed, or underwritten, by each dealer and can theoretically be entirely separated from the number of bonds sold; but the total subscription for sale is not limited by the size of the participation. If the issue is a failure on account of many refusals of participation, each retailer is responsible for his accepted participation only—and not for other bonds left in the hands of the syndicate managers.[1] Small retailers depend for their supply of bonds upon being included in this 'syndicate list,' and since their continued position and reputation among issuers depend upon the prompt and complete acceptance of participations, speed in offering and so making a quick survey of the issue's success is facilitated for the offering house. The possession of a large amount of other bonds may often serve as an adequate excuse for nonparticipation. Where relations between houses are fairly close, a frank refusal may be accepted. Very rarely,

[1] "In an older form of syndicate, now seldom used, syndicate liability for unsold bonds was determined in relation to the total issue, rather than to the individual subscriptions. Thus a participant who had sold all his bonds might still have to accept remaining bonds in proportion to his own subscription."

partial refusals are possible. An issuing house almost always intends (there are some notable exceptions) and is equipped to sell a portion of the bonds it is distributing, and is thus able to care for bonds left undistributed. The amount of participation is determined from the records of past offerings and from a figure furnished as a general guide by the retailer, when he is first placed upon the lists, and revised from time to time.

"The total subscription, furthermore, is flexible in amount. A retailer's indicated participation is considered as a minimum, and he is usually allowed to subscribe for an additional amount up to a reasonable limit, the point of reasonableness being the syndicate manager's estimate of his financial standing and selling ability. Some of the effects of these extra subscriptions will be discussed below.

"The retailer as a member of a syndicate has entered into a definite contract for the purchase of bonds, and the managers have definitely sold them; but there are many provisions in the contract which allow the managers to control the methods by which the retailers dispose of the issue and by which the sale becomes partially provisional.

"One of these is a clause either expressly allowing or prohibiting the **inter-selling of bonds** among members of the syndicate without direct reference to the syndicate manager. Where marked differences in the absorptive power of the market in different cities appear, it is advantageous to allow this transfer of bonds in the shortest possible time. It is accomplished at a specified reduction in price. The inclusion of such a clause in syndicate agreements is fairly recent.

"Another group of clauses is aimed to prevent the selling of bonds by syndicate members to brokers who might immediately offer them for resale at a discount from the offering price and so depress the market at a time when selling pressure is greatest. Part of the blame for this practice rests on the retailer, who feels obligated in many cases to accept bonds for which he knows he has no real market, in order to maintain a good record of acceptances on the books of the issuing houses. They do this, not because issuing houses attempt to force bonds upon them, but rather because the practice of these houses is to seek out the weaker distributers and either reduce their allotments in the future or eliminate them from the syndicate list. Part of the blame arises from the general necessity inherent in the method of syndicate distribution of securing rapid sale for many successive issues.

"Unable to marshal enough capital to carry the bonds, retailers seek brokers who will accept large blocks of bonds, provided there is a discount. Resale at a cut price by these dealers is necessarily harmful to the high-pressure, American method of sale which characterizes all our security distribution. Trouble arises when the issuing house discovers the bonds and traces them to the particular retailer to whom they were allotted; it usually makes this discovery in the regular process of buying up all bonds of the issue which are offered below the offering price during the stated period of the syndicate, thus maintaining the 'market' price very near to the offering price. For this purpose of supporting the market, it is advantageous to reduce the number of dealers offering the bonds to a minimum; or better, to have them listed on some exchange, so that the market condition can be kept well in hand without a constant 'scouting' process to find small offerings and take them up. The discovered seller is always penalized for his offense in one way or another.

"The variation of the practice known as **'investment guaranteed' selling** is also prohibited by large originating houses, some of which make special efforts to discover and punish the practice. Under this arrangement the broker

who buys the bonds agrees to resell them to investors only. If the bonds reappear on the market, he agrees to repurchase them, provided that the syndicate managers discover the bonds and force the retailer to rebuy them (this is a usual penalty for the practice; another is to reduce the profits of the syndicate returned to the member at fault). The prevalence of the whole difficulty is in direct ratio to the activity of the market—that is, the necessity of absorbing closely successive issues is a distinct burden upon retailers; if the number of issues appearing is moderate, there is very little trouble.

"It has been shown that a retailer is often allowed to subscribe for additional bonds above his offered participation. In a good market he may become overoptimistic and subscribe for a large block of bonds, partly because he believes he can sell them and partly because he believes that other houses will also apply for large additional amounts, and that as a result he will merely receive a pro rata fraction of his application. Being disappointed in either of these beliefs, he meets the difficulties outlined above. Trouble more often arises from these causes than from the fact that the dealer is unable to take his ordinary allotment: in the latter case he will not long exist, for the house will either cut his participation amount or remove him from its list. But the tendency to oversubscription remains, being desired by both parties either to insure or increase the profit margin involved.

Firm Withdrawals.—"Allied with this whole problem of satisfactory distribution among retail dealers in a syndicate, but arising from another angle of it, is the practice of allowing 'firm withdrawals.' Formerly, after the oversubscription of an issue by retailers, the practice was for the syndicate managers to allot the available amount of bonds pro rata among all the applicants; if the issue were 100% oversubscribed, dealers who had applied for only 50% more than their regular participation in accordance with their estimate of the issue's popularity (whereas others had subscribed for 200% more) would be forced to accept a reduction affecting their original participation. This caused a great deal of inconvenience and ill will among investors to whom it was impossible to deliver the amount of bonds purchased. To remedy this recurring situation, issuing houses developed the practice of guaranteeing delivery on a stated per cent (ranging from 60% to 100%)[2] of the participation—that is, 'firm withdrawals' from the supply of bonds up to that amount. By doing this, the syndicate manager secures the good-will and better cooperation of dealers. He is obligated, on the other hand, to make a less widespread offering of the issue and to watch the amounts of additional subscriptions during the height of the period of distribution more closely, since he is under contractual obligations to deliver a certain amount of bonds 'firm.' It is claimed that the rapid growth since the war of the inclusion of a 'firm withdrawal' clause is partially the result of greater competition in the field of organization of issues by the entrance of many new organizations into the field.

"For the retailer, this clause in a syndicate agreement is a distinct advan-

[2] "By varying the percentage of participations allowed each 'firm,' an issuing house may bind itself more or less closely to absolute delivery of bonds. A 100% clause—which occurs fairly frequently—means that subscriptions must coincide exactly with the amount of the issue and that retailers will receive the exact amount of their participation; whereas a 60% or 80% clause—other common figures—gives an opportunity for oversubscription and pro rata allotment in the 40% or 20% that is unrestricted. In the actual management of an issue, the syndicate manager will often be able to promise delivery on bonds which he does not possess, thus creating a temporary short interest; he meets these promises with bonds repurchased in the process of supporting the preliminary market during the life of the syndicate, as described above. Occasionally, in a very large issue, this short interest may assume considerable proportions."

age in relieving him of uncertainty, allowing him to make definite sales to his customers in the shortest time, and reducing the necessity of estimating the popularity and selling appeal of a forthcoming issue as a means of setting the amount of his additional subscription so as to secure just the allotment that he can sell profitably.

"The syndicate form of distribution is, then, the most complicated as well as the most frequent. At the present time agreements are flexible and dynamic in the inclusion or exclusion of various clauses. In its application the method is distinctively the outgrowth of American investment methods.

Other Methods of Distribution.—"The second method of distribution is through a **selling group.** Selling groups are used on smaller issues in which the risk of unsuccessful distribution is considered slight. This situation exists usually when the bond is especially attractive, when the bond market is strong, or when retailers have insufficient securities to supply the investment demand. Selling groups occasionally are used simply because the gross profit on the issue is insufficient to permit the formation of a syndicate, or in order to increase profit even when the margin would have permitted the formation of a syndicate (which arouses dissatisfaction among the retailers whose profit is correspondingly reduced). In a selling group no liability is assumed by the members. Applications for bonds are placed with the manager and are filled either in the order of receipt or by allotment, members being paid a single commission based on the confirmed allotment. It is possible for retailers in many cases to secure additional bonds above their allotment by immediate telephone communication with the syndicate manager. The chief advantage of a selling group from the originator's viewpoint is in its economy and simplicity. The disadvantage is that failure to distribute the issue completely forces the originator to assume the unallotted bonds. In general form it resembles closely the English methods of distribution.

"The third method possible, the use of **a wholesale group,** is the least frequent. This method is used for the distribution of small issues, particularly serial bonds of which the dealers cannot be expected to accept allotments which do not include bonds of all maturities. A wholesale group is used to greatest advantage in the distribution of securities which sell quickly and for which the market is well defined, since the average allotment is generally larger than in a selling syndicate or a group. The advantage of a wholesale group, in addition to the fact that it permits complete allotments, is its simplicity. It usually is limited to less than 50 firms, so that approximately all the arrangements can be completed by telephone."

Financial Plan

FIXING TYPES OF SECURITIES.—Every new corporation should adopt a **systematic plan of financing** its activities. This means a predetermination of the kind and amount of stocks and bonds to be issued and the amount to be authorized for subsequent issues. The preparation of such a plan involves the exercise of discrimination in selecting the type of securities to be authorized and the use of judgment in fixing the relative proportions of each type, the terms and conditions on which securities are to be issued and how they are to share in the earnings of the company. Decisions on such matters require a wide knowledge of finance and of the particular industry, as well as the investment market.

The financial plan must stand long after the promotion period is over and

there is no phase of corporate finance which is more important and requires more careful consideration.

FUNDAMENTALS OF THE FINANCIAL PLAN.—In preparing the financial plan, consideration should be given to:

1. The adaptation of the securities to **the investment market.**
2. **Present and future requirements** of the corporation.
3. The **relation between assets and the securities** to be issued.
4. The **probable earnings** of the company.

ADAPTING SECURITIES TO THE INVESTMENT MARKET.—The financial executive, in developing the financial plan, will naturally adapt the securities offered by his company so as to best fit in with the market he is trying to reach. He will consider popular interests and passing fashions in the type of securities he has to offer.

Attention should be given to the desires of prospective investors, as particular issues under certain conditions are readily marketed and at other times they may be looked upon as unfavorable. At one time popular interest may be centered in industrial preferred shares, and at another, convertible bonds may be in demand.

An example of adjusting security issues to conditions prevailing in the investment market may be cited by drawing attention to the fact that during the World War, and immediately thereafter, a great number of corporations issued high interest bearing short-term notes. These securities were issued in large quantities for several reasons. First, there was a public preference for such issues; second, the high interest rates prevailed at that time; and third, corporations believed that interest rates would fall in a few years when conditions would be more favorable for long-term issues.

Generally **familiar forms of securities** should be adhered to as they are more easily marketed and their legal status is fixed. Unfamiliar types should be avoided unless they are brought out by a corporation of great prestige and sponsored by bankers of good standing.

LISTED AND UNLISTED SECURITIES.—Securities to be sold on the stock exchanges may require special form, whereas if they are to be sold in the over-the-counter market, the financial plan need not be drafted according to the rules of the stock exchange authorities. The advice of the investment bankers should be sought at this juncture, as any prejudices of the investors cannot be neglected.

As to **par values**, in case of stocks, although the conventional form is $100, the prospective purchasers may be people of small income who would find it easier to subscribe to shares of a par value of $5 or $10. Of late years many corporations have issued common stock of no par value. There are certain merits in this form of capital stock issue which should be considered when formulating the financial plan.

Bonds are frequently issued in denominations of $1,000, $500 and $100. The last two are quite common since the sale of Liberty bonds has created many small bond buyers.

SECURITIES ISSUED AT OR UNDER PAR.—When **preferred stock** as well as **common stock** is to be issued, it is usually more desirable to sell the preferred stock at par and give a certain proportion of common stock as a bonus than to sell both issues at a discount. A decidedly unfavorable impression is made when the balance sheet of the company discloses a large item of preferred stock discount. Investors in preferred stock have a greater confidence in the financial standing of a company which can sell its preferred stock

at par even though in its initial stages it may offer as an inducement common stock, the value of which will only be determined by future earnings.

Such a method is better than to be confronted with the admission that the financial standing of the company is such that it cannot float its preferred stock at par. In considering this plan the laws of the state where the corporation was incorporated must be considered and complied with. The general rule is that all par value stock must be issued full-paid. That is, property of value equal to the full par value of the outstanding stock must be turned into the corporation or the stock will be deemed to be only partly paid for, thus establishing a claim against the shareholders for the deficiency. In such cases it is not proper that any item of **stock discount** be carried on the books.

PAYING INTEREST IN SEVERAL PLACES.—In putting out security issues every possible convenience should be made for the prospective purchasers. Some of the large corporations which enjoy an international market frequently make interest payable in various countries in which the bonds are likely to be sold. Some bonds issued by large corporations in this country have interest **payable in London, Paris or New York,** while others may pay in New York, Chicago and San Francisco.

PAYMENT BY COMPANY OF STATE AND FEDERAL TAXES.—In some instances it is customary for corporations to agree to pay various state taxes to holders of bonds, as shown in the following statement:

> The Company will agree to reimburse to owners resident in the respective states, upon proper application, the following taxes paid in respect to the Bonds or the interest thereon: the Four Mills Tax in Pennsylvania; any Securities Taxes in Maryland not exceeding in the aggregate forty-five cents on each $100 of assessed value in any year; any Personal Property or Exemption Tax in Connecticut, not exceeding 4/10% of the principal in any year; and any Massachusetts Income Tax, not exceeding in any year 6% of the interest on such Bonds.

Another covenant contained in many bonds relates to so much of the federal income tax as may be ordered deducted at the source. The 1924 law requires a deduction of 2%. The following is a typical covenant:

> Both the principal and interest of this bond are payable without deduction for any tax or taxes of the United States, or any State or municipality thereof, which the Company may be required by law to retain therefrom under any present or future law.

FINANCIAL PLAN ADOPTED TO RETAIN CONTROL.—The balance of control is another factor to consider in developing the financial plan. Where the promoters and bankers have confidence in the future success of the enterprise, they desire the public's money but do not care for the public's partnership, in which case they do not want to surrender to investors either the control of the business or the right to exceptional earnings. For this reason they will retain a large proportion of the common stock to assure them voting control and any unusual earnings, while the public is generally offered some form of bonds or preferred stock. Voting control is generally retained by giving common stock sole voting power and making the issue small. This device is practiced by a large number of New England manufacturing companies.

ADAPTATION OF SECURITIES TO THE CORPORATION.—The requirements of the company must be kept in mind which may make it necessary to reject certain forms of securities which are otherwise desirable. From the corporation standpoint, there should be a well **balanced relation between capital stock issues and bond issues** so that capital requirements can be obtained upon as economical terms as possible. In order to determine the proper

proportion of bonded indebtedness and capital stock issues, consideration must be given to the relation of the assets to the earnings of the company. A failure to obtain a proper relation may result in imposing upon the company an indebtedness which it is unable to liquidate at maturity or place upon it such heavy interest charges that it may be unable to meet them in dull times.

RELATIVE PROPORTION OF SECURITIES ISSUED.—**In public utilities,** where earnings are comparatively low but relatively stable, the financial plan may provide for a large bond issue if the common stockholders are to receive a sufficiently high return to make their investments attractive. In public utilities, in general, it would be an injustice to common stockholders to expect them to furnish all the funds required for capital financing, which accounts for the reason that great numbers of bonds are issued by such companies.

RELATION BETWEEN INCOME AND SECURITIES ISSUED.—In formulating the financial plan, the factor of income should be taken into consideration in determining the amounts and kinds of securities to be issued. The rule of prudence requires that in issuing funded obligations the corporate income should, at a minimum, not only cover **fixed charges** but should leave a fair margin for contingencies. The anticipated income should be ample to provide in addition to all fixed charges and contingencies a reasonable return to the shareholders.

Relation of income to capital issues may be summarized as follows:

1. Assured net income should be sufficient to meet all fixed charges on funded obligations, including sinking fund payments.
2. Income which may be reasonably expected should be enough to cover contingencies and dividends on preferred shares.
3. Additional probable income should be large enough to provide a satisfactory return on common stock.

In developing the financial plan adequate provisions should be made for **contingencies.** The prudent financial manager will adopt a policy of safety in making generous allowances for the hazards of the business, and where they are great, the amount of funded indebtedness will be relatively small and the capital stock issues large.

In drafting the financial plan good faith requires that the **relations between earnings and capital stock issues** be such that there will be a reasonable certainty of an increasing return on the common stock as the business develops.

PROPORTION OF ASSETS TO CAPITAL ISSUES.—In preparing the financial plan the relationship between the fixed, current and intangible assets to the various kinds of capital issues should be considered. Although it may be difficult to show a direct relationship between the classes of assets and kinds of securities issued, there is in reality some relationship between them. These ratios will vary considerably with various types of business, and should be approximately as follows:

Fixed Assets.—The actual value, not mere book value, of the fixed assets should exceed by at least 25% to 50% the proposed bond issues.

Fixed Plus Net Current Assets.—The actual value of fixed assets plus the net value of current assets after deducting current liabilities should at least equal and preferably exceed the outstanding capital obligations, consisting of preferred stock, bonds, etc.

Tangible and Intangible Assets.—The total actual value of the tangible assets and intangible assets should equal or exceed all outstanding obligations and capital issues, such as bonds, preferred and common stock.

CAPITALIZATION OF ASSETS.—When preferred as well as common stock is provided for in the financial plan, the common stock may represent the capitalization of intangible values. Frequently the goodwill, copyrights, patent rights and other intangible assets represent the value back of the entire common stock issue.

In such a financial plan the preferred stock and bond issues generally represent the entire value of the tangible assets.

FUNDAMENTALS AFFECTING CAPITAL ISSUES.—The following fundamental axioms of finance should be observed in formulating the capital structure of the corporation.

1. Bonds should be issued only when the future earnings of the corporation are likely to be reasonably constant and more than sufficient to meet interest charges and sinking fund requirements.
2. Preferred stock may be issued when the earnings, although irregular, when averaged over a number of years are sufficient to leave a fair margin over preferred stock dividend requirements.
3. Common stock only should be issued when the probable earnings of the company are uncertain.

FACTORS TO BE CONSIDERED IN FORMULATING THE CORPORATE FINANCIAL PLAN.—Financial executives in formulating the financial plan for a corporation should consider the following factors:

1. The actual value and cost of the tangible assets required by the proposed corporation.
2. The probable regularity and certainty of the future earnings of the new company.
3. The condition of the security market and temper of the investment public.
4. The attitude of the promoters and investment bankers regarding the type of securities to be issued and the form of compensation they demand and degree of control they expect to secure or retain.

EARNINGS AND COST OF ASSETS IN FINANCIAL PLAN.—In developing a plan of financial organization it is well for the financial manager to bear in mind that there is no normal connection between the **cost of assets** of a corporation and **earnings.** The cost of the property to be acquired, while important in determining the amount of money to be raised by capital issues, should not be a predominating influence in developing the financial plan. The important factor is earning power in amount as well as regularity.

BOND ISSUES AND REGULARITY OF EARNINGS.—Where the nature of the business is such that there is likely to be regularity in earnings, the corporation could consider the advisability of issuing bonds. Bond interest must be paid regularly and if the earnings vary greatly from year to year, the corporation is likely to be unable to earn its interest charges at the first depression it encounters, with the possible result of default and bankruptcy.

The fluctuations of earnings of industrial corporations are generally wide and consequently it is not always a wise policy for such companies to have large outstanding bond issues. Conservative promoters and bankers are reluctant to issue bonds of industrial corporations, and conservative investors in industrial securities do not look with favor on those companies which have

unduly large funded debts. In a new and untried industry, where earnings are speculative to a high degree it is not safe to issue bonds. The oil production industry is an example.

Where the financial manager has reason to expect, after thorough investigation and as a result of past experience, that the net earnings of a company will not under any circumstances fall below a certain amount each year and it is necessary to float a bond issue, the wise course to pursue is to limit the issue to such an amount that the interest charges will fall well below the lowest expected earnings.

Where **purchase money mortgages** are left on the property, or where purchase money bonds or notes are given for plant and equipment, they should be as small an amount as possible and should be of comparative short maturity. The financial plan must be adjusted to provide for such obligations.

BASIS OF DETERMINING PROBABLE EARNINGS.—In computing future earnings the following factors should be considered:

1. Earnings should be compared with those of other concerns engaged in the same business, in the same locality, if possible, or under similar conditions.
2. It is not worth while to make comparisons of probable earnings between unrelated enterprises.
3. The personal equation of the new management should be considered. If the men who are to undertake the management have been successful elsewhere under similar conditions, they will probably be successful in managing the concerns under consideration.

The practice of **"dead reckoning"** is common in the promotion of new manufacturing concerns in localities where such concerns have not previously existed. By "dead reckoning" is meant obtaining statistics prevailing in one city or location and applying the same or similar statistics in another distant city. In such cases, no matter how accurate the statistical computation, there are many unknown factors which will modify the final outcome. Although the statistical factors may be similar, the personal equation comes into play when a new man is selected to go to a distant location and undertake the management of an enterprise, no matter how close the parallel may be.

SUMMARY OF PRINCIPLES IN DEVELOPING FINANCIAL PLANS.—A summary of fundamental principles governing the developing of the financial plan of a new enterprise may be presented as follows:

In a new business in which there is no basis for estimating earnings only common stock should be issued. If a reasonably safe estimate of earnings may be made, based on previous earnings of similar plants, a preferred stock issue may be sold to so-called speculative investors. The preferred stock dividends should not exceed one-half of the average earnings for at least five years past where the promotion is a combination or reorganization of existing plants. The prospective earnings in the promotion of a new enterprise in an established industry should be at least three times the preferred stock dividend requirement.

NEW FINANCING OF AN OLD CONCERN.—There are innumerable circumstances under which it is desirable or necessary to undertake a refinancing of an established concern. Some of the conditions necessitating such changes are:

1. **Business Expansion.**—The business may have developed to such an extent that the original plant equipment, together with the permanent capital, has proved inadequate.

On the other hand, the owners of an established business may wish to expand the business. Such expansion may be along:

(a) The old lines,
(b) A new direction, or
(c) To buy out other concerns or to combine with them.

Before undertaking new financing for the purpose of expansion it may be well for the financial executive to consider:

(a) How fast should the business expand?
(b) Will it pay to expand the business?
(c) Will the old management be capable of handling the increased business?
(d) When is the proper time for such expansion?

2. Insufficient Working Capital.—In the growth of a business considerable fixed assets may have been acquired through the application of current funds from earnings or through the use of temporary loans, the repayment of which may have made inroads on the available working capital. This condition may necessitate additional capital financing.

3. Unavailable Working Capital.—Because current assets such as receivables and inventories which are normally supposed to be liquid are in a "frozen" condition.

4. Need of Change in Form of Obligations.—This will be particularly true where bank loans have been relied on for extensive periods and it has become necessary to convert them into more permanent liabilities.

The form and type of capital liabilities may be of such a nature that they preclude further financing and it may be desirable to provide a new financial structure. Such changes may be brought about at a convenient time such as when capital issues are maturing or are to be refunded.

5. Reorganization.—Sudden losses in operations, through decreases in sales, declines in inventory values, or other reasons, may be so extensive that it may be necessary to revise the capital structure of the company if it is to continue in operation.

READJUSTMENT OF THE CAPITAL STRUCTURE OF A SOLVENT CONCERN.—A readjustment of the capital structure of a solvent concern may occur from some cause or causes other than the need for additional funds or on account of financial difficulties. Some of these causes have been enumerated by Professor Charles W. Gerstenberg in "Financial Organization and Management of Business," page 685, as follows:

"1. Dissolution **because some law, such as the anti-monopoly law, has been violated.**
2. Segregation of companies **specifically required by law** to dissolve their relationships. An example of this form of reconstruction is furnished by the segregation of the coal and railroad companies under the Commodities Clause of the Interstate Commerce Commission Act.
3. Recapitalization as a step **preliminary to consolidation.**
4. Recapitalization as a step **preliminary to refinancing.**
5. Recapitalization **to get rid of arrearages of preferred dividends.**
6. Reconstruction **to get rid of unprofitable units.**
7. Reconstruction **to give active management an interest in the ownership control.**
8. Reconstruction **to reduce taxes.**"

ILLUSTRATION OF FINANCIAL PLAN FOR A SMALL INDUSTRIAL COMBINATION.—The Western Manufacturing Co. was organized to manufacture patented specialties. Its capital stock was $150,000. First mortgage bonds were issued for $25,000. $100,000 capital stock was given for patents, and $50,000 stock was given to a promoter for selling the bonds at par. The $25,000 received for the bonds represented total cash actually invested.

It was found that the business could not thrive with the few specialties it controlled, and other specialties were added. As a result, practically all profits earned from year to year were spent securing and developing new patents. After 5 or 6 years the output became satisfactory. Then a depression wiped out the company's business and cut profits to zero. A recovery has occurred and profits are now about $20,000 yearly. The business has changed considerably in character and is established on a reasonably sound basis. The company, however, is handicapped by its location which is not favorable for its business.

A few miles away is located the Western Machinery Co., a related but not competitive business, owned by James Smith. His plant is worth $60,000 and net earnings are $6,500. In the neighborhood there is also the plant of a concern which went bankrupt some years ago. It has been closed over three years. In their run-down condition the building and other assets are worth over $100,000 but can be bought for much less.

The proposed plan is to combine these three plants under the name and charter of the first-named company. Smith will remain for a short time with the new organization and then retire. It is proposed to capitalize the Western Manufacturing Co. as follows:

	Authorized Issue	Issued at Time of Combination
6% first mortgage bonds	$500,000	$150,000
6% cumulative preferred stock	250,000	180,000
Common stock	250,000	250,000

It is proposed to distribute the securities of the reorganized company as follows:

	Bonds	Preferred Stock	Common Stock
Western Machinery Co.	$ 30,000	$100,000	$250,000
James Smith		20,000	
Owners of abandoned plant	20,000	40,000	
To be sold to public	100,000	20,000	
	$150,000	$180,000	$250,000

It is anticipated that the bonds, with a 20% bonus of preferred stock, can be sold to an underwriting syndicate at par. The syndicate can probably dispose of the bonds alone at par, its selling expenses and profits being covered by the preferred stock bonus. The company will realize $100,000 cash.

The financial plan also provides that Smith shall receive in addition to $20,000 preferred, $30,000 cash, leaving $70,000 cash to rehabilitate the abandoned plant and for working capital.

It also provides that when earnings on preferred amount to 12%, the 70% of preferred remaining unissued at time of organization shall be distributed as a bonus in agreed proportion among owners of the three plants entering the combine.

Net profits are estimated to average at least $60,000, or about three times interest and preferred dividend requirements at the outset.

An independent analysis and criticism of the foregoing plan shows that earnings of proposed combination appear to be loosely estimated, and that

a much more thorough investigation of probable markets for products, of selling expenses, and of actual expenditures required to build up an efficient working organization in the abandoned plant, would be demanded by careful investors. Unless it can be shown as a reasonable certainty that earnings will average $60,000 or more, there will be no advantage to the Western Machinery Co. in carrying through the combination. Its plant is the only one earning large profits. Although the Western Machinery Co. could advantageously use enlarged facilities, it may be asked whether a small bond or preferred stock issue based upon its own assets would not provide needed additional facilities with less risk. Under the plan proposed this company assumes most of the risk, contributes its own profits to the payment of interest and dividends, and must rely on its ability to develop new business for the other two plants. The most successful of the three companies would have to give up the certainty of continued satisfactory profits for the uncertainty of developing a new enterprise. The wisdom of combining a successful going concern with an unsuccessful one may always be questioned. It may be better for the successful concern to raise cash on its own credit and purchase outright the assets of the unsuccessful one. The above plan was abandoned for these reasons.

ILLUSTRATION OF A FINANCIAL PLAN OF RAILROAD.—The financing of a short railroad involves the investment in construction work, including terminals, of about $4,183,000. It is estimated that two years after date of opening the road to operations, gross earnings will be $2,018,000. Operating expenses are estimated at about 65%, or $1,300,000, and taxes and insurance at $80,000, a total expense of $1,380,000. This leaves an estimated net revenue of $638,000 to pay fixed charges and provide surplus. It is estimated that there will be a deficit of about $100,000 during first 2 years of operation. Equipment is estimated to cost $1,650,000 and the working capital to amount to $500,000. Total capital required is:

Cost of construction	$4,183,000
Cost of equipment	1,650,000
Loss first 2 years of operation	100,000
Working capital	500,000
	$6,433,000

Some capital required for earlier stages of construction is tied up without any income to pay interest on it, until operations begin. One plan of taking care of this expense is to form a construction company to build the road and furnish all other required property and cash. This company should be prepared to hand over to the railroad company $600,000 in cash, the sum required to provide working capital and to cover loss on first 2 years' operation. Construction company should also pay interest, taxes, insurance, etc., up to time property is handed over to railroad company. In exchange for the railroad and cash the railroad company will then turn over all its securities to construction company, from sale of which construction company will derive its profit. The promoters of the railroad will be the organizers of the construction company.

On basis of normal earnings of $638,000 the company might be capitalized as in the following table.

This leaves a balance of $58,000 a year for contingencies out of income for first 10 years.

Common stock required for bonuses to purchasers of first mortgage bonds and preferred stock is $1,100,000. For their own remuneration and to retain control of the company the promoters issue $4,000,000 common stock to the

construction company, which, under above estimates, leaves $2,900,000 common stock for themselves.

	Nominal Value	Cash Receipts to Corporation	Fixed and Contingent Charges
5½% first mortgage bonds on all property, exclusive of equipment, to be disposed of at 90 with a bonus of 2 shares of common stock to each $1,000 bond	$4,000,000	$3,600,000	$220,000
6% 10-yr. serial equipment notes	1,500,000	1,500,000	90,000
Annual payment during 1st 10 years of operation to retire above notes			150,000
8% cumulative stock to be disposed of at 90, with a bonus of 1 share of common to each 5 shares of preferred	1,500,000	1,350,000	120,000
	$7,000,000	$6,450,000	$580,000

During first 10 years common stock could not expect to receive dividends as $150,000 of serial notes is to be retired each year. Interest on that amount each year should be added to the balance available for contingencies. At the end of 10 years there will be no interest to pay on the notes and annual payments on the principal will cease. Therefore $298,000, less any reserve or payments for contingencies, may then be paid as dividends on common stock.

Note that first mortgage bonds are approximately equal in amount to actual cost of mortgaged property, not a very conservative arrangement, but rather common in railroad finance. Preferred stock is equal to more than remaining value of tangible assets, being partly offset by good-will. Common stock is offset only by good-will and prospective earning power. The amounts of the different classes of securities have been determined rather on the basis of earnings than of asset values.

Marketing Securities

Securities may be marketed through promoters, investment bankers, or by direct sales by the company.

SALES OF SECURITIES THROUGH PROMOTERS.—The sale of securities **through promoters** is generally a special operation, designed to meet a special case. The promoter might dispose of the securities to one or more individuals or corporations, or might arrange for their sale and distribution to the public through investment bankers. In certain cases, the promoter might attempt to build up a sales organization and distribute the securities to the public himself.

SALES OF SECURITIES THROUGH INVESTMENT BANKERS.—Investment bankers are divided into **three classes**—the wholesalers, the large retail distributers and the small bond houses, the last named possessing as a rule a local and rather limited circle of customers. Certain of the large wholesalers are also large retailers themselves.

WHOLESALE INVESTMENT BANKERS.—The wholesale investment bankers generally are represented by the larger banking houses in New York. Such banking houses purchase directly entire issues of corporate securities and they may have special distributing facilities for handling the sale of the securities to the public. If they do not have retail distributing facilities, they arrange for such distribution by syndicating the issue to retailers. Very often such wholesale bankers work out all the details of the financial plan of the corporation and determine the amount and kind of securities to be issued, make all

investigations, arrange the formation of syndicates, when necessary, superintend their operation, and attend to everything that is necessary to consummate the sale of the securities to the public.

Procedure Followed by Wholesale Banking Houses.—The procedure followed by the large banking houses is somewhat as follows:

When a proposition is offered them, either by their own investigators, by promoters, or by other bankers, the head of the buying department will make a rough estimate of its feasibility. If this preliminary examination meets with his approval and the securities to be issued will be acceptable and adaptable to their clientele, they make further arrangements and employ engineers to report on the physical and economic value of the property owned by the company. At the same time accountants will be employed to go over the records of the company.

When the reports of the accountants and the engineers are received and accepted, some arrangement, generally provisional, will be made under which the securities of the company may be acquired. Lawyers are employed to examine the agreements and other legal aspects of the corporation, and prepare the legal papers covering the transaction. When bonds are issued, the indenture or mortgage, and in the case of preferred stocks, the amendments to the articles of incorporation, are also drawn by the bankers' attorneys, who usually insert a number of special restrictions for the protection of the position of the security holders.

Arrangements are then made for the sale of securities. Where the issue is large, a syndicate is generally formed to handle the issue.

TYPICAL INVESTMENT BANKERS.—Among the leaders in the group of wholesale bankers may be classed J. P. Morgan & Co., The Chase Securities Co., Kuhn, Loeb & Co., and others, who usually market large issues through syndicates, whose members are composed of large and small retail dealers. Another type of investment banker is represented by such firms as Lee Higginson & Co., Harris, Forbes & Co., and the National City Co., who not only are prominent in originating business, but also sell direct to investors through their own sales forces.

THE COMPENSATION OF INVESTMENT BANKERS.—Investment bankers prefer to handle large issues at a small rate of commission rather than small issues at a higher rate. The rate ranges from 3 to 5% for large issues of railroad bonds, but the smaller bond issues and preferred stock issues are sold at commissions which may range from 5 to 10%. Occasionally as high as 15 or even 20% might be charged for marketing small industrial preferred stock issues.

RESPONSIBILITY OF INVESTMENT BANKERS FOR ISSUES BROUGHT OUT.—Although investment bankers generally do not obligate themselves in a contractual way to be responsible for the issues they sell, there is a certain **moral obligation** on their part to look after the interest of their customers who purchase their securities. Generally in their advertising, they set forth the information reported to them and on which they rely and which they believe to be correct. They do not, however, guarantee the correctness of such information. The following form is generally used in all circulars:

> The information contained in this circular is based upon official statements and statistics on which we have relied. We do not guarantee but believe it to be correct.

The better class of investment bankers attempt to follow closely the fortunes of companies whose securities they have distributed, and if there are signs of trouble, will try to improve conditions in any way possible. If affairs go from bad to worse, they usually organize a protective committee and make every effort to save as much as possible for the security holders.

ADVANTAGE OF LISTING SECURITIES ON STOCK EXCHANGE.—Listing securities on the recognized exchanges, such as the New York Stock Exchange, affords a wide market and provides easy facilities for the sale of securities at any time after their original distribution. Usually this is a factor in favor of such securities. Listing securities on the New York Stock Exchange carries with it assurances that they are bona fide issues of a legitimate company. Further than this listing does not go.

SELLING SECURITIES DIRECT BY THE COMPANY.—A corporation may sell its own securities to outsiders in one of the following ways—first, by personal solicitation; second, by circularizing; third, by advertising.

Personal solicitation is probably the most satisfactory way for a company to sell securities direct. This is generally done through acquaintances and influential business men in the locality. Ordinarily a small company cannot market its securities unless its officers and representatives have a strong personal influence.

Generally **circularizing** is not the best method to be followed by a company in selling securities because it is extensively used by swindling corporations or those nearly so. Reputable bankers, however, frequently follow this method in sending advertisements of their securities through the mails to a selected list of customers. If properly safeguarded, this is quite economical and effective.

The **prospectus** is an essential element in any selling campaign. In style, it should be concise and dignified. It generally sets forth the terms and conditions of the sale of the securities to be marketed and an outline of the history and future prospects of the company. It is generally printed for wide distribution. The most important part of the prospectus is the statement of past earnings in a going concern and the balance sheet. These statements should go back at least 5 years.

The balance sheet should be so constructed that it will submit to analysis and interpretation by the class of security buyers the company is trying to reach.

Although widely advertised names on the board of directors are often used as a means to aid in the sale of securities, shrewd investors examine the lists with caution.

The **expense in selling securities** through advertising and circularizing is sometimes as high as 25 to 50% of the offering price, whereas the expense of selling good securities should not, under the best conditions, exceed 5 or 10% of the sales price.

DIRECT SELLING PROPER FOR SMALL ISSUES.—Small issues may properly be sold through personal efforts of the corporate officers, as the larger and better class of investment bankers do not care to sell securities of a company in amounts of less than about $500,000. Direct sales of securities by a company becomes increasingly difficult as the amount of the issue increases. As a rule it is more economical for a concern of moderate or large size to sell good securities through investment bankers than to attempt to market them itself.

DIRECT SALES OF SECURITIES BY PUBLIC UTILITY COMPANIES.—In recent years a number of public utility companies have undertaken the direct sale of their securities to their customers. The purpose of such sales is not primarily due to the advantages of direct sales by the company but the cultivation of a friendly interest on the part of the consuming public. The quasi-public nature of public utility companies makes it desirable to have the good-will of the consuming public which can be obtained by a system of consumer stock ownership.

DISADVANTAGES OF DIRECT SELLING OF STOCK BY THE COMPANY.—The disadvantages of selling securities direct by a corporation may be summarized as follows:

1. Not Economical.—A corporation is not always equipped to sell its securities to the public. To do such selling requires an advertising campaign and a selling organization. On account of its lack of experience in this field the expense is likely to exceed the cost of having it done by investment bankers who are equipped for such security sales.

2. Slow Receipt of Proceeds of Sale.—A sale of its own securities by a company generally means that the proceeds come in slowly over a considerable period. A sale to investment bankers means the immediate realization of the proceeds.

3. Unsatisfactory Class of Security Holders.—Securities sold through an investment banker generally reach a better class of investors than can be reached by the company by direct sales through advertising or its own limited sales force. Investors purchasing securities through a banker generally hold them for long periods and in times of financial difficulties are more likely to cooperate with the management of the corporation through the banker than those who buy the securities direct from the company.

On the other hand, where the company sells its own securities they are likely to be bought by a limited or local group of persons who purchase such securities because of their speculative possibilities and if these are not realized will try to dispose of them, thereby creating a large floating supply, which may tend to impair the company's general credit and standing in the community.

4. Lack of Banking Support.—Probably one of the best reasons for floating stock and bond issues through banking houses is the support such bankers can give the new corporation in providing funds for expansion and for emergencies that may develop. Another reason is that such bankers can often be of great assistance in maintaining a market for the company's securities.

5. Prejudice of Investing Public.—In some cases the investing public might assume that where a corporation undertakes to market its own securities, there is some weakness and the corporation cannot find a reputable banker to offer its securities and is therefore forced to offer them itself.

Corporate Capital

In view of the confusion which sometimes exists regarding the meaning of capital, capital stock, capitalization, capital assets and similar terms a few paragraphs are given explaining and differentiating these terms.

CAPITAL STOCK DEFINED.—The **authorized capital stock** of a corporation is the amount of stock it is authorized to issue by its charter. This amount

can be increased or diminished only by amendment of its charter in the prescribed statutory manner.

The **issued capital stock** is the amount subscribed and paid for. **Treasury stock** is stock which has been issued full-paid, and which is acquired by the issuing corporation by gift or purchase. It must not be confused with **unissued stock.**

CAPITAL STOCK AND CAPITAL DISTINGUISHED.—The capital of a corporation is the sum total of all of its assets less its liabilities, whereas the term capital stock as used in corporate records means the amount of stock authorized and issued. "The funds of a company may fluctuate. Its authorized capital stock remains unchanged, save by legislative enactment. This distinction between the value of the property of incorporated companies and their capital stock is perfectly familiar." (*The State* v. *Morristown Fire Assn.*, 23 N. J. L. 195.)

CAPITALIZATION.—The legal meaning of the word **capitalization** refers to the total par value of a corporation's authorized capital stock. In a popular sense it refers to the total par value of all the security issues, consisting of stocks and bonds, outstanding at any given time. More accurately the term should include corporate surplus, particularly in view of the widespread use of capital issues without par value.

Capital or capital funds is a term often used to describe the total investment in assets of a business. This investment may include fixed and current assets. **Capital assets** is a phrase frequently used for fixed assets in which are included those assets which are of a permanent nature and which are essential to the continuance of the business. Such assets are real estate, plant, machinery, equipment, and **the intangible assets** are goodwill, patent rights, etc.

In a manufacturing concern having a plant with machinery and equipment of $1,000,000, inventories of $250,000 and accounts receivable and cash of $200,000, it would be said that the capital assets amount to $1,000,000 and the current assets to $450,000.

CAPITAL AND NET WORTH.—The term capital is often used to denote the stockholders' total investment in a corporation, or the **net worth.** In a sense the capital stock of a corporation is the valuation made by the organizers of net worth of the enterprise if the stock has been issued at par. At the beginning this is theoretically true and as a matter of legal fiction is a fairly accurate valuation. This status, however, does not continue after the corporation operates as a business unit. The net worth changes constantly, the result being reflected in periodical adjustment of surplus.

The book figures of net worth at best are an awkward measure of value. Such values change from day to day whereas book figures as representatives of values are adjusted only at stated intervals and then many of the figures represent changes made on an arbitrary basis. The necessity of making such estimates in evaluating the assets and liabilities, actual, contingent and potential, makes it very difficult in accounting practice to give a statement of net worth which is absolutely correct from a theoretical standpoint, and at best all that can be expected is a statement of such values which is substantially correct for practical purposes.

Capitalization

BASES AND PRINCIPLES OF CAPITALIZATION.—In financing industrial corporations capitalization is one of the first problems to be considered. The basis of capitalization may be one or more of the following:

1. The value of the assets
2. Cost of property
3. Earning power of the business

COST AND VALUE OFTEN CONFUSED.—In finance, particularly when considering the capitalization of corporations, cost frequently plays a large part and is often confused with value to which it is rarely equivalent in a given instance. While the cost to reproduce under certain conditions approximates value, there are, at times, elements of an intangible nature connected with the property which would be ignored if the reproduction cost alone were accepted as the value.

CAPITAL INVESTMENT AS BASIS.—The popular concept is that a corporation's capitalization should equal the amount of capital invested. This idea is probably based on the legal fiction caused by the statutes of many states which require that the initial issue of capital stock must be issued at par.

Small or close corporations, with few exceptions, generally issue capital stock and bonds at a par value, exactly or nearly equivalent to the cash or cash value of property which the corporation receives. In its initial stages the capital stock and net worth of such a corporation are practically equivalent. The agreement between the capital stock and investment disappears after profits or losses from operations occur. If the concern has the proper amount of capital, and earns a normal rate on its investment all of which it pays out as dividends, there will be very little divergence between its capitalization and net worth. This equilibrium is, however, seldom maintained.

In many large corporations or small corporations of a speculative nature, there is no close relation even at the beginning between the amount of capitalization and value of its assets. Generally such concerns must use part of their original capital in order to get capital. If of a speculative character, the assets acquired will fluctuate up or down immediately after organization.

Initial capitalization legitimately covers not only cost of tangible assets, but also certain intangible elements in form of promotion, engineering, and developmental expenses. Frequently these are capitalized in a single account, such as Organization Expenses or Deferred Expenses. Ultimately, depending on the nature of the items and the policy of the management, these are either written off or are permanently capitalized. **Interest during construction** is usually permanently capitalized.

CAPITALIZATION BASED ON EARNING POWER.—Where capitalization of a corporation is based on earning power it usually bears little relationship to tangible values. Earning power is probably a more correct basis for capitalization than asset values. This principle of capitalization, however, does not accord with the principles of law governing corporations which assumes that investment is the basis of capitalization. Out of this conflict between legal theory and business practice many of the difficulties, evasions and legal fictions connected with corporate capitalization have developed.

In an economic sense, which is also the business view, wealth is measured not by the amount of investment but rather by the income produced. This can be illustrated by comparing two businesses, or better, two pieces of property which are equal in cost, character and stability. The one produces a net income of $40,000, and the other $10,000 a year. If the two incomes are equally stable, the one is worth four times the other. If income is accepted as the determining factor in the value of investment, earning power is the correct basis for determining the capitalization of a concern.

CAPITALIZATION OF EARNING POWER.—This principle is generally accepted as correct among the financiers of this country. As to the practice in other countries, Paul M. Warburg some years ago wrote as follows:

"Stock-watering, that is, capitalization of earning power or goodwill, is permitted in England and France, while it is not allowed in Germany. While personally I prefer the German system, it is a mistaken idea to think that the capitalization of earning power necessarily means taking advantage of somebody. If the German sells at 200% an industrial stock paying 10% dividends, it amounts to the same as if the Englishman had sold at par twice the amount of shares on which 5% dividend is paid."

Capitalization on the basis of earning power is not necessarily the result of a carefully thought out plan. On the contrary, it usually is the by-product of an effort on the part of the organizers of corporations to make the corporate stock attractive so as to be able to sell it at the highest possible price. It is for this reason that corporations which have shares that are actively dealt in are more generally capitalized on an earning power basis than are the corporations which are closely held.

THE MAGIC OF PAR VALUE.—The reason for the adoption of earning power as a basis of capitalization is well expressed by a writer who does not believe the basis a sound one.

"But if the earning power basis of capitalization is both unsound in theory and impracticable in application, why is it so generally supported by American financiers? The answer is fairly clear: It is that the earning power basis of capitalization gives promoters the opportunity to set the nominal capital at whatever figure they think will give the securities their highest market value. One of the strange but well-recognized phenomena of the financial market is that an enterprise capitalized at a liberal figure is very apt to seem more valuable to the investing public than would that very same enterprise if capitalized at a lower amount. The 'magic of par value' often has a decided influence. American promoters are past masters in the art of taking advantage of this preference for a large nominal amount of stocks and bonds. And in this game their best ally is the highly sanctioned theory that capitalization should be determined by earning power. For by estimating future earnings at an extravagant figure and then by capitalizing these earnings at a very low rate, the promoters are able to justify an issue of securities far in excess of the actual cost of the property."

RATE OF CAPITALIZATION.—The nature of the business and the stability of earnings are the determining factors in arriving at the rate of capitalization. In **public utility companies and railroads** it is customary to capitalize earnings, which are practically certain, at a low rate. The stocks of such companies which pay 6 to 7% in dividends sell at or near par.

Where earnings can be estimated with reasonable certainty, it would be conservative to capitalize them on an 8 to 10% basis in common stock, depending on the prevailing rate of profits of that type of business in the section of the country where the company is financed. In order that the shares of stock of manufacturing and trading concerns may sell at or near par, it is necessary that they usually pay from 8 to 10% dividends and earn considerably more. It is, however, not usually considered necessary to have shares sell at par when first issued. Hence the original capitalization on a basis lower than would be used if the same properties were to be sold for all cash.

DEFINITION OF EARNING POWER.—The phrase "earning power" is a vague term used with all the elusiveness and flexibility necessary to serve

the purposes of persons using it as a basis for capitalization. This earning power may be past, present or prospective. The prospective earning power may in turn be possible or probable.

The nature of each business will determine the proper method of arriving at the earning power to be used as a basis of capitalization. Such earnings may be classified as follows:

1. Those which are practically certain and can be determined in advance, as may be the case in public utilities or other businesses of a monopolistic character.
2. Those which can be estimated with approximate accuracy on the basis of previous years' earnings, as in the case of established concerns.
3. Those which are uncertain and are estimated on the basis of earnings of companies in a similar line of business.
4. Those which have no basis for estimate but represent only earnings hoped for, as in the case of new enterprises in untried fields.

In corporations organized to conduct a speculative business, where the profits may prove to be very large or nothing, no conservative basis can be recommended for capitalization. The promoters of such corporations usually determine the capitalization on the basis of their plans for selling the stock, which may be governed by the financial condition and the public attitude toward speculative stock issues.

Sometimes a corporation has prospective earnings which may fall into the classes mentioned, that is, earnings which are certain, those which are probable and those which are hoped for. If the financing is conservative, no attention will be paid to the last one. The first two may be used as the basis for different classes of securities. Frequently in financing public utilities part of the certain earnings may be used as a basis for determining the amount of bond issues.

COMPUTING EARNING POWER.—In estimating the earning power of a **new business** in order to arrive at the capitalization, it is necessary to ascertain the probable gross income for a typical year. From this amount would be deducted the operating costs and expenses. Due allowance would then be made for such fixed charges as taxes, insurance, interest, depreciation, etc. In addition, liberal reserves should be made for contingencies. The remainder will be regarded as the net income to be used as a basis of capitalization. What the rate should be must be determined by what is regarded a fair return in that line of business, considering the degree of risk and stability in question.

Assuming that $100,000 is the net income indicated in the above hypothesis and that the nature of the business is such that 10% is regarded as a satisfactory return on the capital invested, then by capitalizing the earnings of $100,000 on the basis of 10%, $1,000,000 would be the amount of par value of stock the concern might be authorized to issue.

AVERAGE EARNINGS.—The anticipated earnings should be the average earnings over a series of years and not merely the earnings for any one year. This holds particularly true when it is contemplated to increase the capitalization of the concern from time to time, as the business and earnings increase.

If a company has been doing business successfully over a period of years and has had reasonably stable earnings, it would seem to be an easy matter to estimate the probabilities for the future; yet the experience gained during the last 25 years in forming combinations of industrial companies indicates quite clearly that even expert estimates are an unsafe guide.

The following interesting table shows the disparity between the promised and the actual profits in the case of a number of important industrial com-

binations. The aggregate earnings of the subsidiary companies before the combination are taken as 100; the percentages given show whether these prior percentages were exceeded or otherwise under the combination.

Mount Vernon-Woodberry Cotton Duck Co.	166%
National Salt Co.	134
New England Cotton Yarn Co.	98
International Cotton Mills Corporation	56
United States Ship Building Co.	56
United States Realty & Construction Co.	50
Asphalt Company of America	40
American Malting Co.	31
American Bicycle Co.	24

The results shown above may have been due in part to padded statements of earnings on the part of the constituent companies, which just prior to the combination were trying to make the best possible showing for themselves; to some extent they are due, doubtless, to the fact that combinations are generally organized at the height of a period of prosperity. In general, however, they seem to represent a tendency toward actual decline in efficiency under the new organization.

OVERCAPITALIZATION.—Overcapitalization as used in its popular sense means that the total outstanding capital stock of a corporation has a nominal or par value substantially greater than the value of net assets or more than is warranted by the probable earning power of a business. Generally corporations are considered as overcapitalized when their outstanding issues of capital stock are so large that reasonable dividends thereon cannot be earned or paid for a number of years.

Some of the ways in which overcapitalization may be brought about are as follows:

1. **Over-enthusiasm in estimating the future earnings** of the business, and basing the capitalization on such optimistic and hoped for earnings.
2. **Difficulties of promotion** which required large distribution of common stock, (a) at low prices, (b) as bonus with preferred stock, or (c) for services of promoters.
3. **Fraudulent transactions** in which large issues of common stock are issued without regard to possible future earnings or the assets of the company. Such promotions are primarily stock selling transactions without a bona fide attempt legitimately to finance corporations.
4. **Loss or destruction** of a large part of the essential assets not compensated by insurance and where the corporation has not sufficient reserves or surplus to replace such assets.
5. **Losses year after year from operations** exhausting surplus and making inroads on the capital stock.

Among the **disadvantages of overcapitalization** are:

1. High incorporation fees, annual franchise taxes and capital stock taxes.
2. Credit may be questioned by bankers and creditors.
3. Excessive capitalization may prevent payment of dividends or if paid may make their rate ridiculously low.
4. Deceptive as to earning power in that a low dividend payment on an overcapitalized stock issue conceals the actual earnings on the real investment.
5. Under certain conditions may lead to extravagance in the operation of a new corporation.

UNDERCAPITALIZATION.—Undercapitalization exists where a corporation issues its total capital stock at a nominal or par value which is considerably less than the fair value of the assets and is low compared with the earning power of the business. It may be brought about when a new concern with very good earning possibilities capitalizes on a basis of a conservative estimate of future earnings. A going concern in which the earnings are reinvested in the business over a long period, resulting in building up a large business from an investment which was relatively small, results in a condition which is popularly considered undercapitalized.

Some of the **disadvantages of undercapitalization** are:

1. If the business is successful the earnings will appear very large on the outstanding capital stock which when brought to the attention of the public may cause (a) disapproval and possible loss of trade or (b) increase competition by causing others to enter such an apparently lucrative business.
2. An undercapitalized company generally has greater financial strength than is apparent, and while this is an advantage from the standpoint of conservatism, it has its disadvantages in that it may be rated unfavorably by those dealing with the business at its inception.

Capitalization of Good-Will and Other Intangibles

The intangibles generally capitalized are **good-will, patent rights, copyrights, trade-marks, trade-brands, and secret processes.**

In formulating a financial plan for a corporation, particularly in cases of reorganization and changes of ownership, the subject of valuation of intangibles for purposes of capitalization frequently presents a perplexing problem. The very fact that intangibles were often used as a means of manipulation in connection with stock issues indicates that their valuation and treatment were in general little understood or properly regarded.

DEFINITION OF GOOD-WILL.—"Good-will, in its commercial sense, is the present value of the right to receive expected future super-profits, the term 'super-profits' meaning the amount by which future revenue, increase, or advantage, to be received, is expected to exceed any and all economic expenditure incidental to its production."

Leake's definition is sufficiently comprehensive to include all elements usually regarded as creating good-will. Chief among these are: **good name, reputation, business connections, custom, individuality,** and **locality.** No present value in good-will exists unless expected future revenue exceeds cost of producing it (including current expenses, depreciation, cost of management, and interest on capital, both owned and borrowed). The **interest rate** to adopt depends on what rate is necessary to attract capital to the undertaking in question. Having regard to risk involved, rate of return on investments varies from, say, 4½% where element of risk is negligible to, say, 7%, where risk incident to ordinary industrial undertakings is present. Before a good-will value can be said to exist it must be shown that expected future yearly profits will exceed **normal hire** of invested capital in the industry in question, because this normal hire can be obtained by capital at any time without payment of a premium. Payment for good-will is equivalent to payment of a premium.

WHERE VALUATIONS REQUIRED.—Good-will valuations may be required under the following circumstances:

1. Upon the purchase of an enterprise by another concern or when a merger takes place.
2. Upon the incorporation of an enterprise.
3. Upon the admission of a partner to a partnership.
4. Upon the dissolution of a partnership, resulting from the death of a partner, the voluntary retirement of a partner, or the bankruptcy of a partner.
5. As a matter of routine policy.
6. Upon the purchase of a professional practice.

VALUATION OF GOOD-WILL ON EXCESS EARNINGS.—Since it has become the almost universal rule to value good-will on the basis of earnings in excess of interest on investment and a fair allowance for managerial services, the four following factors must be considered:

1. Value of net assets of business as a going concern.
2. Earning power of business.
3. The rate of interest to allow as a return on net investment.
4. The number of years' purchase of profits to take.

1, 2. To determine **net investment** it is necessary to arrive at a mutual agreement or else secure an expert appraisal of the fixed assets and a valuation by accountants of current and working assets. It may be necessary to make certain adjustments in the balance sheet items. Thus, if leases have not been carried at any figure, they should be given a figure and brought into the balance sheet. A revaluation of timber lands or of mineral rights may be desirable if these have increased from a low valuation to one based on surveys and estimates by engineers. Various changes may be necessary to allow for **amortization** or **depreciation.** Present, not past, conditions with respect to depletion, depreciation, and amortization must be considered, because it is under these conditions that the future income of the business will be considered. If extraneous items are found among the assets they should be carefully considered. If a reserve fund exists which produces an income lower than normal rate of profit, this should be excluded in considering both principal and income. But if investments yield a return equivalent to ordinary commercial return upon capital, it is not necessary to eliminate them. Caution should be exercised in eliminating assets which represent a dead expense because ownership of them frequently contributes indirectly to the profits of a business.

In manufacturing it is sometimes advisable to construct facilities of sufficient capacity to meet growth in demand which will extend over a period of 5 years or more. Before doing this a reasonable estimate of increased volume of business must be secured. In valuing good-will, cost of maintenance, overhead, and insurance of temporarily unused facilities should not be charged against profits, nor should interest on excess capital invested be deducted in arriving at excess profits upon which valuation of good-will is based. Instead, valuation should be made upon basis of facilities employed.

3. **Proper rate of return on investment** is normal rate at which capital can be secured for the enterprise in question at date of good-will valuation. This varies with nature of business, kind of assets involved, and ratio of earnings to assets. There are certain limits within which capital can be raised by sale of bonds. Likewise there are certain limits within which preferred stock can be sold. These limits vary at different times, being affected by the conditions of the money and the investment market. If capital can be secured for industrial purposes by issuing 7% preferred stock to amount of the tangible assets, provided the dividend has been earned on an average of at least 4 times over a

series of years, 7% is the rate to charge on tangible assets in valuing good-will. Again, if a 5% bond could be sold equal in amount to 40% of tangible assets, a 6% preferred stock for another 40% of tangible assets, and if common stock paying 10% were issued for the balance of tangible assets and good-will, then the average rate of 6½% would be a proper rate to use, provided certain ratios of earnings to interest charges and good-will could be shown.

For valuing good-will the **legal rate** should not be regarded as the **normal rate,** although in a number of New York decisions 6% was adopted.

The Treasury Department uses a rate of 7 or 8% in stable businesses, but in other cases a rate of 10% is used.

4. The **number of years' purchase of profits to take** is the least settled point in good-will valuation. Its determination is partly a matter of judgment. The transferability of the good-will must be considered. Some kinds of good-will are **personal,** attaching to the individuals who create them. Others are readily transferable to a vendee. Again, some good-will is **institutional,** as distinguished from that attaching to a single product. Good-will attaching to the name of Heinz is institutional because it helps the sale of any product coming under that name. Good-will attached to the **name of a particular product,** as *Danderine* or *Cascarets* is not institutional and has a more limited application. Institutional good-will should be valued at a greater number of years' purchase than good-will which rests upon a single brand of goods.

If good-will is nation-wide or world-wide it should be valued upon a greater number of years' purchase than if it is of only local extent. Good-will of a chain store should be valued on the basis of a higher multiple of average profits than should good-will of one large store with a more limited market. Tending to create a higher purchase of good-will are: wide distribution in proportion to volume of product; wide variety of products sold under an institutional name; staple products in general demand by buying public; increasing volume of business. The last factor may be considered in applying the usual formula, or it may be considered as an independent factor. Possibility of adverse legislation may be a factor.

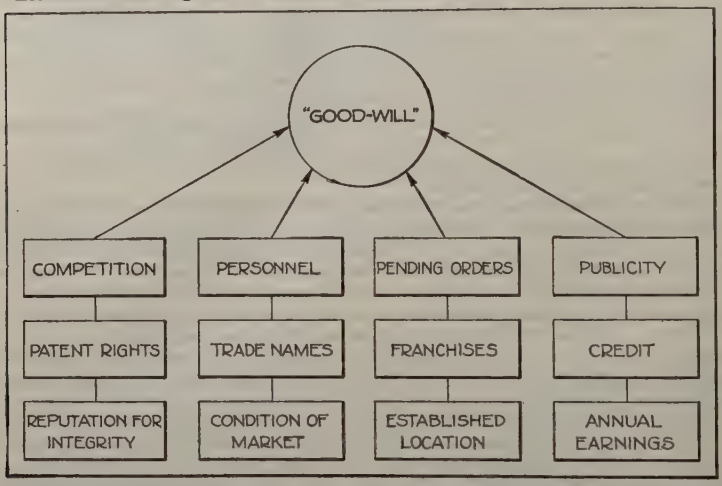
In fixing an allowance for managerial services, give consideration to character of business, i.e., whether staple or otherwise; to kind of training required of manager; and to usual standard of compensation for services established in similar lines of business.

It is sometimes necessary to make certain variations from the results shown in profit and loss accounts when determining net profits, with a view to ascertaining a certain number of years' purchase price.

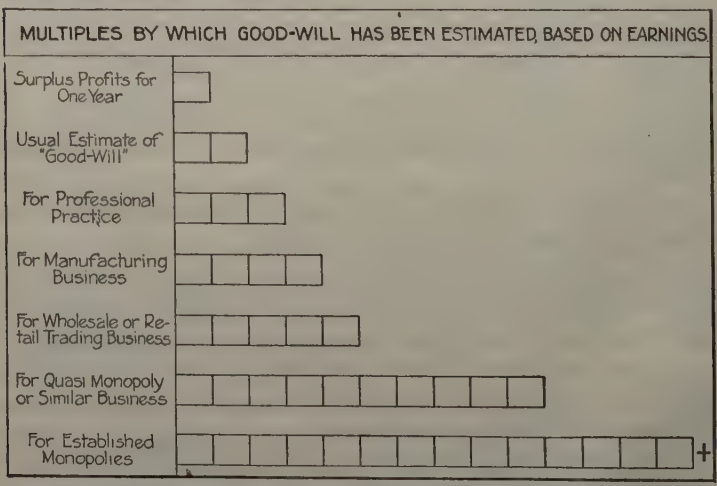
At formation of the International Harvester Co. the good-will of the merging concerns was fixed by adding to the sum of profits of the two preceding years an additional 10% thereof. This method is fairly common among manufacturers. But in ascertaining net profits certain classes of income and expenditure were not included, among these being interest on accounts and bills receivable, on certain accounts payable, and also cost of collecting receivables. Depreciation was not deducted in determining value of good-will. Consequently, profits figure employed in placing a valuation on good-will was larger than that shown in Profit and Loss account.

The courts generally have not approved valuations based on more than 5 years' purchase, although in New York the Appellate Court in *Von Au* v. *Magenheimer*, permitted a multiple of 6 years' purchase; while in valuing the good-will of Tiffany & Co. a multiple of 10 was approved. This is the maximum multiple permitted by the courts. The courts recognize, however, that in most American cases a period ranging from 2 to 6 years is adopted, the number being

Elements Entering Into Valuation of Good-Will—Graphic Presentation



Some of the factors that enter into a computation of the "good-will" of a business. For obvious reasons these factors vary greatly in importance, dependent upon the peculiar conditions that affect the business.


MULTIPLES BY WHICH GOOD-WILL HAS BEEN ESTIMATED, BASED ON EARNINGS
Surplus Profits for One Year
Usual Estimate of "Good-Will"
For Professional Practice
For Manufacturing Business
For Wholesale or Retail Trading Business
For Quasi Monopoly or Similar Business
For Established Monopolies
+

The first rule in computing "good-will" is to determine the net earnings of a business, from which sum is deducted the interest on capital actually employed and the value of the owner's services. The result, multiplied ordinarily by 2 but sometimes by many times that amount, has been accepted as the value of the "good-will."

NOTE.—The above charts are reproduced from *System, the Magazine of Business*, for January, 1912.

dependent upon the nature of business, length of time it has been established at a given place, and extent to which it is known to the public. The tendency to go beyond the 5-year rule is justified by the increasing stability of forms of industrial organization and to improvement made in training executives. The accompanying chart reproduced from *System*, Jan., 1912, shows multiples employed in estimating good-will of various enterprises.

It is not desirable to employ as high a multiple against excess earning power when excess earnings are large, as when comparatively small; and it may be desirable to use different rates for different parts of such excess earnings. Suppose Company A has earnings of $10,000 in excess of a normal return of 7% on its net worth. If it is desirable to multiply such excess of $10,000 by 5 to determine value of good-will, or, as technically known, 5 years' purchase price of excess profits, then were average earnings $20,000 instead of $10,000 it would not be desirable to multiply the total $20,000 by 5, but to multiply first $10,000 by 5 and remaining $10,000 by, say, 3, thus securing a figure of $80,000, instead of $100,000, for good-will. Each additional block of excess earnings should be taken at a still lower rate. In general terms, the greater the surplus earnings as related to normal profits, the lower should be the rate by which they should be multiplied.

PERMANENCY AND AMOUNT OF GOOD-WILL.—Good-will is a much more permanent asset in some lines of business than in others. Those lines of business which employ an overwhelming proportion of fixed capital assets, ordinarily attribute their earnings almost wholly to these assets, and there is seldom any occasion for entering such an item as good-will. On the other hand, those corporations that are engaged chiefly in trading, their earnings being dependent to a great extent upon the rapidity of their turnover, or upon popular favor, may find, if they are successful, that their earnings mount far beyond any sum that can reasonably be attributed to their capital assets.

There are many cases, also, where highly profitable and rapidly growing companies may have trouble in valuing their tangible assets at a figure high enough to offset the amount of stock which their directors feel should properly be outstanding, and good-will must be resorted to for a balancing item.

ACTUAL GOOD-WILL VALUATIONS.—The figures at which large American corporations have placed their good-will in recent years are shown below:

B. F. Goodrich Co.	*$57,798,000.00
American Tobacco Co.	54,099,430.00
P. Lorillard Co. (trade-marks, brands, etc.)	21,137,927.00
Liggett & Myers Tobacco Co. (trade-marks, brands, etc.)	40,709,711.00
Republic Motor Truck Co.	4,805,936.00
Pyrene Manufacturing Co. (patents, trade-marks, and good-will)	1,002,450.00
W. S. Light & Heat Co. (patents and good-will)	4,608,256.40
Cluett Peabody (good-will and trade-names)	18,275,000.00
Butterick Co. (patents, good-will, copyrights, trade-marks, etc.)	13,893,271.00
Silver-Burdett & Co. (publishing rights, contracts, copyrights, etc.)	1,024,820.00
Hendee Manufacturing Co.	6,157,646.00
American Chicle Co. (good-will, trade-marks, etc.)	18,826,642.00

* Omitted from balance sheet after 1919.

Sometimes valuations are assigned to good-will although it has not been brought into the balance sheet as an asset. Recently the advertising manager of the California Fruit Growers' Exchange estimated the value of the Sunkist

trade-mark at $1,000,000, but the president of the exchange thought that it would be nearer $10,000,000. The value of the name *Bull Durham* has been estimated at between $10,000,000 and $20,000,000, and it is said that $10,000,000 has been offered for the *Camel* cigarette good-will. It is a familiar saying that such trade-marks as *Ivory Soap*, *Kodak*, and *Uneeda* are worth a million dollars a letter.

In Sept., 1914, an appraisal was made of the estate of Joseph Pulitzer, former proprietor of the New York *World* and St. Louis *Post-Despatch*. The earning power of each was first estimated on the basis of average yearly earnings for 4 years preceding Mr. Pulitzer's death; but from this average a considerable amount was deducted to allow for certain favorable contracts for the purchase of white print paper which were soon to expire. A deduction of $100,000 was also made to allow for services of Mr. Pulitzer; also 6% was deducted on actual capital invested. Average net earnings left amounted to $196,411 for the St. Louis *Post-Despatch*, and $81,180 for the New York *World*. The appraiser capitalized these amounts on a 10% basis, resulting in a good-will valuation of $1,964,110 for the former paper and $811,800 for the latter.

There is a tendency among some companies to dispense with good-will altogether, because it is sometimes viewed with suspicion. The General Electric Co. has written its good-will down to $1, and the Victor Talking Machine Co. to $2. The tendency to treat good-will in this way was checked by the excess profits tax, but with the repeal of this a return to this policy may be expected.

The following extract from the New York Times, Nov. 3, 1922, refers to the valuation of the estate of Temple Bowdoin:

"Transfer Tax Appraiser Berwin, in estimating the value of the good-will interest, accepted the average annual profits for ten years, and multiplied this sum by three. This is called the 'purchase value,' and is explained by George Brokaw Compton in a treatise on good-will as follows: 'This multiple, or a number of times the average annual net profit, is held to equal the amount a purchaser would be willing to pay solely for the advantage of continuing the business.'

"Appraiser Berwin accepted 'three years' purchase' as the value of Mr. Bowdoin's interest in the good-will over the protest of Lafayette B. Gleason, counsel for the State Tax Commission, on the ground that the appraiser should have fixed the 'purchase' at a higher multiple than three. In appraising an interest in the business of Franklin Simon & Co., the multiple of five was fixed by the Surrogate, while the good-will value of stock in Tiffany & Co. was estimated on a basis of 10 years' purchase. Stock in the Hearn department store was appraised on a multiple of five. It is expected that an application will be made in the Surrogate Court to increase the value of the good-will on the ground that a higher multiple than three should have been used, and that the basis for the good-will fixed at the present time will be used in later taxation of estates of other members of the Morgan firm."

GOOD-WILL IN PURCHASE AND MERGER.—When one concern purchases an interest in another, good-will is brought in to represent excess earning power of purchased concern. An alternative procedure is suggested in the *Accountant* for June 3, 1922 (p. 784), as follows:

"As good-will represents the capitalized value of the company's earning powers it might, therefore, be preferable for new companies to issue their ordinary shares at a premium representing the purchase price of the good-will, thus avoiding the necessity for showing any good-will value in the Balance

Sheet; then, if profits did not reach the standard expected, the good-will would be automatically eliminated by the corresponding fall in the market price of the shares."

When companies buy out small traders who have given personal attention to the management of affairs, they frequently pay for good-will more than conditions warrant. The small owner earned a profit which recompensed him not only for his investment but also for his time and personal exertions. Stockholders do not make the same personal exertion and so cannot expect to secure the same profits. This circumstance frequently leads to over-capitalization of companies through their anticipation of a continuance of the profits of the small absorbed enterprises, but whose earning capacity under changed conditions does not fulfil expectations. If the old owner continues with the concern as manager the situation is more favorable, but then earnings on capital ordinarily are decreased because of increased investment necessary to make it possible to capitalize good-will.

Ordinarily the **amount to be paid for good-will** is determined in the agreement of sale entered into between purchasing company and vendor. If the agreement does not specifically mention good-will, it may be inferred that it does not exist unless purchase price is in excess of assets taken over. Also, such assets may be representative of other intangible assets—as, patents, trade-marks, copyrights, etc. Sometimes good-will is regarded as one asset in combination with these other items which may be essential to its existence.

To have a **sales value** good-will must represent a substantial excess of earning power over a fair return on the investment plus a reasonable allowance for managerial salaries. Merely because a business is well established does not mean that it has good-will for which a buyer can afford to pay a large sum. If, under any conditions earnings are not largely in excess of interest on capital plus managerial salaries, it is improbable that a new management can increase them greatly. **Mere sentiment** attached to an old but losing business is not good-will. Frequently lack of earning power is ascribed to bad management, but this plea is overworked. Profits should be increasing. In case of a business which is standing still the danger of retrogression is great.

RELATION OF COMMON STOCK TO GOOD-WILL.—When good-will represents an important item in capitalization of mergers and consolidations, it is usual to make it the basis for an issue of common stock. Preferred stock is issued to amount of physical assets and from total net earnings is deducted the sum required to pay dividends on this preferred stock. Remainder of net earnings is then capitalized to find amount of good-will and therefore amount of common stock to be issued.

To illustrate, assume case of a concern having net earnings of $4,000,000 a year. Its physical property is valued at $21,000,000 and preferred stock is issued to that amount. A 6% dividend is to be paid. This amounts to $1,260,000, which deducted from net earnings of $4,000,000 leaves $2,740,000 of yearly profits due to good-will. Now, if common stock dividend rate is to be 8%, good-will valuation will be $2,740,000 ÷ .08 = $34,250,000, which, for sake of round numbers, might be placed at $35,000,000. At organization of the U. S. Steel Corp. preferred stock and bonds were issued to cover tangible assets and common stock was issued to represent good-will, its amount being such that had profits been maintained it would have received a dividend of 7½%. So little confidence existed in the ability of the Steel Corp. to succeed that at one time a share of its common, par $100, could be bought for $8. Yet it later sold for more than 136.

Sears, Roebuck & Co. was capitalized on a similar basis. At time of organi-

zation in 1906 its material assets were valued roundly at $10,000,000. The preceding year profits were $2,868,061.31. Preferred stock was issued to amount to $10,000,000 and was assigned a 7% cumulative dividend, necessitating $700,000 yearly. This left $2,168,061.31 upon which to base good-will valuation. Common stock was placed at $30,000,000 and was therefore capitalized at between 7% and 8%.

The requirements of the **excess profits tax law** in effect from 1917 to 1921 to the effect that no valuation of intangible assets acquired for stock in excess of 25% of total par value of a corporation's stock should be recognized, interfered with this plan of capitalization. When, in 1919, the Endicott-Johnson Co. was organized, the good-will was valued, not on basis of producing power, but arbitrarily in order to comply with provisions of the tax law. The capital stock amounted to $29,000,000; $7,000,000 of this was based on good-will. It was stated that had good-will been based on earnings or a lump sum valuation, it would have been placed at a much higher figure.

GOOD-WILL IN PARTNERSHIP INCORPORATED.—When a partnership is to be incorporated and the old partners are to become sole stockholders in new company, the necessity of bringing in good-will is not apparent, because each would secure his proportionate interest and his due proportion of profits. In such a close corporation capitalization is not a matter of importance; in fact it is frequently fixed at an amount which is purely arbitrary. When, however, there is a likelihood of changing membership, the question of capitalization becomes of importance; it may be laid down as a general rule that if stock is sold at any time, an undercapitalization will be found disadvantageous. For this reason, when a firm is incorporated, good-will should be valued as carefully as any other asset.

GOOD-WILL BASED ON TRADE-NAMES.—An essential difference exists between good-will of a concern which sells a **staple product** which is bought and sold under its staple name but without reference to the producer, and good-will of a concern which sells an article under a **trade-name** and which is always traded in with a knowledge of the producer or of the brand. The former kind of article is usually advertised under its trade-name, and if the market is an expanding one, it gives rise to a form of good-will of which the owner cannot be easily deprived. Good-will which is built up on trade-names may, however, be suddenly lost if the article becomes unpopular for some reason. The **tobacco business** affords an illustration of good-will built up on trade brands. Most forms of manufactured tobaccos are sold under **special brand names.** Extraordinary profits have resulted from the popularity which some of these brands have acquired. Such popularity must be based upon actual valuable qualities possessed by the goods. Brands of manufactured tobaccos are in this respect like many so-called proprietary articles—patent medicines, perfumes, liquors, toilet preparations, and chewing gums.

GOING CONCERN VALUE.—The expression **going concern value** is employed in place of **good-will** in connection with valuation of public utilities. Mr. Justice Moody, of the United States Supreme Court, in *Knoxville Water Co.* case, defines going concern value as follows: "This sum we understand to be an expression of the added value of the plant as a whole over the sum of the values of its component parts, which is attached to it because it is in active and successful operation and earning a return."

Wm. H. Bryan's definition: "It is the value such a plant has over and above its physical value, due to the fact that it is not a bare and idle system, but it

is in actual operation, doing business with large numbers of connected customers. It is something like the good-will of a business but is even more tangible."

Various methods have been employed to **estimate going concern value.** Frequently English syndicates, when buying property in the United States, have valued this item as the equivalent of the net income of a given number of years, or, in other words, as a given number of years' purchase price. But when the utility possesses a **monopoly,** the majority of court decisions are against allowing anything for going concern value. In other cases it is customary to allow for a reasonable expenditure of money in getting the business of an undertaking established. This item was first officially recognized by Judge Brewer in 1894, in the *Kansas City Waterworks* case. He said: "The city steps into possession of a property which not only has the ability to earn, but is, in fact, earning. It should pay, therefore, not merely the value of a system which might be made to earn, but that of a system which does earn."

One method of determining going concern value is to base it on net earnings. But it must be remembered that courts are not inclined to favor property valuations arrived at by this method. It was followed by the Wisconsin Commission, in *Hill* v. *Antigo Water Co.*, and in *State Journal Printing Co. et al.* v. *Madison Gas & Electric Co.* The method followed is illustrated by results secured in case of the electric light plant in Madison. Cost of electric plant at time of acquisition was first determined as closely as possible. To this was added cost of all new extensions, increases in value of land, depreciation, and interest and profit calculated on original cost at rate of 8%. From the total thus secured net earnings of the year were deducted. The balance indicated value of plant at end of year. This amount was then carried forward and became "earning value" as of Jan. 1 of following year. To this amount same items as shown above were again added. In this way the value was determined for each year and used as starting point in year following. The last value determined, in this case for year ended Dec. 31, 1908, was taken as earning value of plant. Depreciation, it should be noted, is added to value instead of being subtracted from income. By either method the result is the same, but the Commission calculated on setting up a depreciation account to which a certain sum should be added out of surplus each year. Moreover, computing interest and profit at rate of 8% and adding this amount and depreciation to general cost, resulted in carrying forward to next year any balance of depreciation, interest, and profit which was not covered by the year's net earnings, and which was to be paid during later prosperous years in the life of the plant.

CAPITALIZATION OF TRADE-MARKS.—Trade-marks, particularly if they are well and favorably known, have a value which may be capitalized. The ownership of trade-marks on proper registration is practically perpetual whereas a patent is limited to 17 years. The valuation of trade-marks for purposes of capitalization presents problems which are very similar to the valuation of good-will.

CAPITALIZATION OF SECRET PROCESSES.—One of the most intangible of assets is the item of secret process. Some concerns consider a secret process a more important asset than a patent on the ground that if the process is developed by the company it is able to keep it a secret, whereas if it is patented, there is a danger of it becoming known. On the other hand, if such a process is not registered and it becomes known, discovered or developed by a competitor its value is gone without right of legal action.

When secret processes of manufacture enable goods to be produced at a cost lower than that incurred by competitors, a valuation may be arrived at by

capitalizing the savings likely to result over a period of years based upon the estimated production.

Although the exploitation of secret processes may give a company a distinct financial advantage great care is necessary in evaluating such processes for purposes of capitalization. Probably the most conservative basis is to capitalize secret processes at the cost of development or at cost when purchased. A good financial policy is to set up a liberal reserve against the secret process during the early years of its life.

CAPITALIZATION OF BRAND NAMES.—Some products are purchased largely because of the fact that the brand name has become a household word. Intrinsically such products may be of no greater value than the same or similar product sold under a commercial or unbranded name. Such brand value is largely built up by advertising.

Brand values may sometimes be determined by sales of the same or similar brand names. As, however, such sales usually have peculiar features which differentiate them from other cases where no sale has taken place, other methods of valuation may have to be employed.

In some lines of business it is the practice of the manufacturer to sell part of the product under a brand name at a certain price, selling the remainder of identically the same product at a lower price without the brand name or in bulk for redistribution. The value of a brand name in such a case can be computed by capitalizing the excess earnings which can be shown to arise from the sales under the brand name. Care must be taken not to assume that if all of the manufacturers' product was sold under the brand name, the profits would rise proportionately. A restricted market may be part of the reason for the higher price named for the branded article.

When the condition indicated in the foregoing paragraph does not exist, it may be necessary to use a method of capitalization previously outlined herein for goodwill valuation. A fair return is to be allowed on the investment in net tangible assets; the excess of the actual or potential earnings over such return is then capitalized at an appropriate rate.

Classification of Stock

The capital stock of a corporation is the amount of stock it is authorized to issue and has issued. A certificate of stock is the **written evidence of the contract between the corporation and the holder** and states the proprietary interests and rights of the owner in the corporation. Such certificates of stock may be classified as follows:

1. According to rights and limitations.
2. According to their par value.
3. According to conditions governing their issue.

PREFERRED STOCK.—Preferred stock represents a portion of the capital stock which has been given **certain preferences and limitations** not enjoyed by the ordinary or common stock.

"Generally the rights, powers and privileges of preferred stockholders depend upon terms upon which it is issued; preferred stock taking a multiplicity of forms according to the desire or ingenuity of the stockholders, and the necessity of the corporation itself." (*Storrow* v. *Texas Cons. Compress, etc. Assn.*, 87 Fed. 612.)

The rights of preferred stockholders are **defined by the charter and by-laws**

of the corporation which constitute the terms of the contract between the corporation and the preferred stockholders.

Nature of Preference.—Preferred stock may have one or more of the following preferences:

1. Preference as to dividends.
2. Preference as to assets in dissolution.
3. Protection of the preferred stock against future issuance of securities having a prior claim on assets or earnings.
4. Convertibility, at the option of the holder, into common stock.
5. Voting power in case of default in dividends or covenants of corporation.
6. A sinking fund to retire preferred stock. This frequently makes the preferred stock very similar to a debenture bond.

Nature of Limitations.—Preferred stock may also have certain limitations. The most common are the following:

1. Limitation of participation in earnings.
2. Restricted or no voting rights.
3. Redeemable at the option of the company or at some specified time.

PREFERENCE AS TO DIVIDENDS.—The preference usually takes the form of a prior claim to dividends and is generally limited to 6 to 8% in industrial or business corporations. As a rule preferred stock is entitled to no more than the specified preference, regardless of the amount earned by the company or distributed to the common stockholders. The preferred stock may participate further in dividends on certain terms where such terms are prescribed in the charter and by-laws of the corporation and which are usually set forth in the certificate of stock. Such stock is generally designated as participating preferred stock.

Cumulative and Non-cumulative Preferred Dividends.—Preferred stock dividends are either **cumulative** or **non-cumulative.** A cumulative dividend, if not paid, accumulates from year to year, so that if profits are not sufficient to pay full rate in one year the unpaid dividend or portion thereof is a prior claim in succeeding years before holders of common stock receive dividends. Non-cumulative preferred stock has a prior claim on the profits of the current year only, so that the corporation need not make up in future years any unpaid dividends. Ordinarily non-cumulative preferred stock is undesirable because it is to the interest of the common stockholders to defer dividends on it. Most industrial preferred stocks bear **cumulative dividends** at the rate of 6, 7, or 8%. Unless the charter provisions authorizing the preferred stock specifically state that it is non-cumulative, it will be held to be cumulative. It is best, however, to have the cumulative feature expressly provided. Unpaid cumulative dividends which have accumulated over a period of years and have so become burdensome are sometimes **funded,** securities of some kind being issued in satisfaction of the claims of the preferred stockholders.

The court decision in the *U. S. Cast Iron Pipe* case in 1924 has given rise to a new legal phrase. Decision was in effect that a **non-cumulative preferred stock** is entitled to receive no dividends not earned in any year, but that any dividends which are earned in a given year accumulate on such preferred until paid. In order to get around this the reorganization agreement of Wilson & Company, which provided for some preferred and Class A stocks which were to be non-cumulative for a certain period and cumulative thereafter, said: "Dividends on this stock shall be non-cumulative for a period of

five years (in case of Class A; period is 2 years for preferred), whether or not earned in whole or in part in any year of said period."

BASIS OF DISTRIBUTION OF EARNINGS TO PREFERRED STOCK.—In considering an issue of preferred stock the following points as to distribution of earnings should be decided:

1. What the **fixed dividend rate** shall be.
2. Whether or not the **dividend** shall be **cumulative.**
3. What **rights of participation** may be given in excess earnings.

CALLABLE PREFERRED STOCK.—Frequently preferred stock is issued by a corporation and carries with it a callable feature in that it is made redeemable at the option of the company at any time or at some specified time. This feature might detract from the value of such securities from the investors' standpoint were it not for the fact that it is generally provided that it must be redeemed at a premium of from 5 to 25 points, giving the original purchaser a good profit. It may be a decided advantage to the issuing corporation to have a redemption clause so that the stock can be redeemed if necessary.

Preferred stock may be retired by lot, when legally authorized, by assigning to each share of stock a serial number and drawing lots for their retirement in the manner usually prescribed for such drawings.

The **advantages to the company** of issuing callable preferred stock may be summarized as follows:

1. Condition of the investment market may be such that common stock or bonds can be sold on favorable terms.
2. The company may not be sure of its earning capacity. If the income should be small, the company will not be embarrassed by its inability to meet fixed interest charges on a bond issue and if the company is prosperous it can recall the issue of such preferred stock.

The **redemption figure** is usually placed above par. From 105 to 110 is quite common, although in some instances they have run as high as 125. The **time for redemption** may be at a definite time, before a certain time or within certain dates, generally a number of years after issue. A familiar provision is that such securities may be called on any dividend date upon 30 days' notice.

CONVERTIBLE PREFERRED STOCK.—Preferred stock may sometimes carry with it a provision that the holder may convert it into common stock on a prescribed basis, or in some instances into the bonds of the company. Such provisions generally carry with them a time limitation during which period the conversion privilege must be exercised.

PARTICIPATING PREFERRED STOCK.—A preferred stock which may participate in dividends over and above its fixed rate is generally called a participating preferred stock. After the preferred stock has received its dividends and the common stock has received a stipulated amount and surplus profits are still available for distribution the question may arise as to the rights of the preferred and common stockholders to share in this excess profit. If the preferred stock is not to share in the additional profit, the certificate should state that it is non-participating.

Although there are innumerable **types of participation rights** the following are a few of the most common:

1. On preferred stock a designated dividend is paid in preference to common stock. If earnings are sufficient a dividend on common stock is paid up to a fixed rate, after which the preferred and common share equally.

2. Preferred stock may receive its preferred dividend and then may participate equally with common stock.

3. Preferred and common stock may receive designated dividends, after which the preferred may participate with the common stock in surplus earnings, but at a declining rate. An illustration of such an arrangement would be as follows:

Preferred stock receives 7% if earned.
Common stock receives remainder up to 7%.
Preferred and common share equally up to 4% additional. Then preferred receives 1% to every 3% of additional dividends distributed to common.

PREFERRED AS TO ASSETS.—Preference as to assets on involuntary dissolution is usually equal to its par value. In voluntary dissolution it is usually entitled to its call price and accumulated dividends before any payment goes to the common. To obtain these preferences it must be set forth in the certificate. This preference, however, may not be worth as much as it appears to be, as other securities having a prior lien may, in case of liquidation, absorb most of the value. It has often been found, in practice, that in reorganizations preferred stockholders have possessed no material advantages over common stockholders.

VOTING PRIVILEGES.—Voting privileges are often denied preferred stockholders. Sometimes partial voting rights are accorded preferred stockholders when dividends are not paid over a short period, while complete voting power is sometimes given if dividend requirements are not paid for a longer period. Complete voting power usually accrues to the preferred stock provided any violation of the preference covenants occurs and is not corrected on reasonable notice.

PROVISIONS SAFEGUARDING PREFERRED STOCKS.—In recent years a number of features have been developed to safeguard preferred stocks and make them more attractive to investors. Some of these provisions are:

1. Protection Against Bond Issues.—Protection against bond issues usually takes the form of a provision requiring the consent of a large majority, generally over 75%, of the outstanding preferred stock to secure authority to issue bonds. Sometimes mortgaging the property is prohibited entirely.

2. Protection Against Further Issues of Preferred Stock.—As a further protection of the preferred stock there may be provisions that no stock may be issued which has priority over or is on a parity with the preferred stock outstanding without the consent of 75% of the preferred stock.

In some issues it is provided that these things may be done if, after due notice, say, 25% of stock does not object.

3. Maintenance of Working Capital Ratios.—Provision may be made that the ratio of current assets to current liabilities shall be maintained above a specified minimum. Such a provision should include a definition of current assets and current liabilities.

DISADVANTAGES OF PROVISIONS SAFEGUARDING PREFERRED STOCKS.—Provisions limiting the issue of bonds or preferred stock may hamper the development of the business should it be necessary to secure additional capital through the sale of bonds or future issues of preferred stock. This emphasizes the importance of a well planned financial plan.

Overcoming These Disadvantages.—The effect of such provisions may be mitigated by having other clauses which provide for the acquisition of additions

and betterments through the issue of bonds or additional preferred stock when the earnings and net assets meet certain requirements.

Another method of overcoming such disadvantages is to make use of the callable feature should it be impossible to obtain the consent of the required number of preferred stockholders to consent to a bond issue or a further preferred stock issue. When the outstanding preferred stock is redeemed a new issue of bonds or preferred stock may be sold.

SINKING FUND REQUIREMENTS.—A cumulative sinking fund requirement may be another method of protecting the preferred stock and making it attractive to investors. The operation of the sinking fund increases the equity of the preferred stock in the property from year to year.

This requirement might operate by providing that a fund be created by setting aside, say, 5% per annum of the greatest amount of preferred stock outstanding for the purpose of retiring the issue at not more than, say, 110. In some cases a sinking fund of this character might be treated as a minimum sinking fund with an additional sinking fund based on earnings.

The sinking fund requirement virtually constitutes a fixed charge and care should be taken to make the minimum requirement not unduly heavy.

RETENTION OF WORKING CAPITAL IN THE BUSINESS.—A protection to preferred stockholders is a provision to prevent the dissipation of working capital through the payment of dividends on common stock at a time when conservatism demands that such dividends be passed. This requirement may take the form that common dividends cannot be paid which would reduce total **net tangible assets** to less than, say, 250%, and the **net current assets** to less than 150% of the preferred stock outstanding.

LIMITATIONS OF DIVIDENDS ON COMMON STOCK.—Preferred stock may be protected by having a provision that no dividends shall be paid on common stock until a **reserve is created** and maintained equal to 1, 2 or 3 years' dividend requirements on the preferred stock.

ENFORCING RESTRICTIVE PROVISIONS.—In all cases where provisions are made to protect the preferred stockholders there should be adequate penalties and means of enforcing them. An effective means to accomplish this is that the preferred stockholders shall receive sole voting power when the provisions of the contract are violated.

Typical Statement of the Rights and Restrictions on Preferred and Common Stock.—A statement of the rights, preferences, privileges and restrictions or limitations respectively attaching to the 8% cumulative first preferred stock and the common stock of the Motor Wheel Corporation follows:

A. The Preferred Stock shall be entitled to receive out of surplus profits dividends cumulative from the quarterly dividend date next preceding the day of issue, or from the day of issue if it be a quarterly dividend day, at the rate of eight per cent. (8%) per annum and no more, payable quarterly on the fifteenth day, to stockholders of record on the first day, of each of the months of February, May, August and November, in each year, before any dividends shall be paid on the Common Stock, which Common Stock, subject to the conditions hereinafter set forth, shall be entitled to receive all net income, profits or surplus distributed as dividends in excess of the said cumulative dividends of eight per cent. (8%) per annum, payable on the Preferred Stock.

B. On any voluntary distribution of capital assets, the Preferred Stock shall be entitled to receive an amount equal to 115 per cent. of the par value thereof, and any unpaid dividends accumulated thereon, and no more; and on any other distribution of capital assets, the Preferred Stock shall be entitled to receive an amount equal to 100 per cent. of the par value and any unpaid dividends accumulated thereon, and no more. After distribution

shall have been made to the Preferred Stock as above provided, the Common Stock of the Corporation shall be entitled to receive the remainder of such capital assets.

C. The Preferred Stock shall have no preemptive right in or right to subscribe for any additional stock of whatever class which may hereafter be issued by the Corporation.

D. The Preferred Stock shall be redeemed on September 1, 1949, at par; but the Corporation reserves the right to redeem or retire any or all of the Preferred Stock prior to the said date at 115 per cent. of the par value thereof and all unpaid dividends accumulated thereon to the date fixed for such redemption. If less than the whole amount of outstanding Preferred Stock be so redeemed at any time, the Stock to be so redeemed shall be selected by lot, in such manner as the Board of Directors may determine. At least thirty days' notice in advance of such redemption shall be mailed to each holder of Preferred Stock to be redeemed, at his address registered with the Corporation, and such other notice shall be given in the manner to be fixed by the By-laws; and on and after the date fixed for such redemption the said Stock shall cease to bear further dividends, and the respective holders thereof shall have no other right or interest therein, except to receive payment therefor, at the said redemption price, upon presentation and surrender of their respective certificates.

E. Within ninety days after the termination of each fiscal period, commencing with the fiscal period ending December 31, 1920, the Corporation shall set aside in a Sinking Fund a sum in cash equal to at least fifteen per cent. of the balance of its net income for such fiscal period, remaining after the payment of current dividends on the Preferred Stock during such period and all accumulated dividends, if any (but in no event less than a sum equal to three per cent. of the largest aggregate par value of Preferred Stock at any time issued and outstanding), and the Corporation shall thereupon apply the said Sinking Fund either to the purchase of Preferred Stock in the open market or at private sale, at prices not exceeding a sum equivalent to 115 per cent. and accrued dividends, or if the Corporation shall be unable to apply all the moneys in the Sinking Fund to the purchase of Preferred Stock prior to July 1 in any year, then it shall apply the moneys so remaining to the redemption as above provided, on August 15 next succeeding, of so much of the Preferred Stock as the said moneys shall be sufficient to retire at the said redemption prices. All the Preferred Stock so purchased or redeemed shall forthwith be cancelled, and the total authorized amount of Preferred Stock of the Corporation shall be reduced accordingly.

F. The Corporation will at all times maintain the aggregate amount of its net current assets and the net current assets of its constituent companies at an amount at least equal to 125 per cent. of the par value of the oustanding Preferred Stock, and it will at all times maintain the aggregate amount of its net tangible assets and the net tangible assets of its constituent companies at an amount equal to at least 250 per cent. of the par value of the outstanding Preferred Stock.

G. Except as otherwise expressly provided by law, the Preferred Stock shall have no right to vote for the election of directors so long as the Corporation shall not be in default as hereinafter provided. In case, however, and whenever, the Corporation shall be in default in maintaining net current assets or net tangible assets at the respective amounts hereinbefore stipulated, and any such default shall continue for the period of six successive months, or if the Corporation shall be in default for the period of sixty days in the payment of any quarterly dividend or in setting aside any required Sinking Fund instalment, the Preferred Stock shall thereafter have equal voting rights with the Common Stock (on the basis of one vote for every ten dollars par value of Stock) for any and all purposes, including the election of directors; and such rights shall continue in the Preferred and Common Stocks, respectively until all matters in respect of which the Corporation was in default shall have been made good and all accumulated dividends shall have been paid in full, at which time the right to vote shall again vest in the Common Stock exclusively; provided, that if, at any time, the Corporation shall be in default in the payment of any five consecutive quarterly dividends, thereupon the right to vote for the election of directors shall pass to the Preferred Stock to the complete exclusion of Common Stock, and such right shall continue in the Preferred Stock, exclusively, until all accumulated dividends shall have been paid in full, at which time the said right shall again vest in the Common Stock exclusively; provided, that the Board of Directors elected by the holders of Preferred Stock shall not have the power to retire or redeem Preferred Stock except through the operation of the Sinking Fund.

H. The Corporation shall not execute any mortgage upon any of its fixed assets, or cause or suffer any lien in the nature of a mortgage to be placed thereon (except to secure the

purchase price of property by a purchase money mortgage of not exceeding seventy-five per cent. of the fair value thereof) except with the prior consent in writing of seventy-five per cent. in amount of the outstanding Preferred Stock; and the Corporation shall not, either directly or indirectly, make, issue or negotiate any issue of secured or unsecured bonds, notes, debentures or other funded obligations by their terms payable more than one year from the date of issuance thereof, or become or be an accommodation endorser, guarantor or surety on any notes, bills, bonds, debentures or other obligations for the payment of money except those of a constituent company, if the holders of twenty-five per cent. or more of the outstanding Preferred Stock shall object thereto.

I. The Corporation shall not cause, suffer or permit any constituent company to make, issue or negotiate any issue of bonds, notes, debentures or other funded obligations by their terms payable more than one year from the date of issuance thereof, or to execute or place any mortgage, or lien in the nature of a mortgage, upon any of the fixed assets of such constituent company, except to secure the purchase price of property by a purchase money mortgage of not exceeding seventy-five per cent. of the fair value thereof.

J. In each fiscal period, the Corporation shall cause its books and accounts, and the books and accounts of its constituent companies, to be audited by a certified public accountant of recognized standing; and if, in any fiscal period, the Corporation shall fail to cause such audit to be made, then, upon the written request of twenty-five per cent. or more of the outstanding Preferred Stock, the Corporation shall permit such audit to be made by certified public accountants designated in such request.

K. No class of stock shall hereafter be created ranking prior to or on a parity with the Preferred Stock in the payment of dividends or the distribution of capital assets. The par value of Preferred Stock issued and outstanding shall at no time exceed two-thirds of the Corporation's actual capital paid in.

L. No Preferred Stock, other than the initial issue of $2,500,000 par value, shall at any time be issued unless the average net income of the Corporation for the period of twenty-four months ending not more than sixty days next preceding the issuance thereof shall have been at least equal to two times the aggregate annual dividend requirements of the Preferred Stock outstanding and that proposed to be issued; nor shall the Corporation in any event issue any additional Preferred Stock if the Corporation shall be in default in the payment of any quarterly Preferred Stock dividend or in setting aside any Sinking Fund instalment, or if, by the issuance of such additional Preferred Stock, the respective ratios borne to the Preferred Stock then outstanding, including that proposed to be issued, by the net current assets or the net tangible assets of the Corporation and its constituent companies shall be reduced below the percentages hereinbefore specified. In the computation of the average annual net income for the purpose of this Article L there shall be included the average annual net income for the same period of any property or plant to be acquired with such additional Preferred Stock or with the proceeds of the sale thereof, and also the amount of the annual interest charge for the same period on loans to be discharged by the sale of such additional Preferred Stock; and in the computation of net current assets and net tangible assets for the purpose of this Article L there shall be included the proceeds of the sale of such additional Preferred Stock of the net current assets and the net tangible assets respectively to be acquired with such proceeds.

For the definition of the terms herein employed, reference is hereby made to the Articles of Association of the Corporation, as amended, a duly certified copy of which is on file with the Transfer Agent.

COMMON STOCK—DEFINITION.—Common stock is stock which has no special privileges or rights but which is entitled to whatever capital or income remains after prior claims are satisfied. In general common stock represents the **final equity** in an enterprise.

One kind of **common stock** stands for the entire capital of the business, if there are no preferred stockholders, no bondholders, and no noteholders. Another kind of common stock merely represents an equity in the assets after other securities having a prior lien are considered. The tendency is away from the simple capital structure of the older form of corporation with but one class of stock, all common, toward a more complicated capital structure.

Dewing says that common stocks of the first groups are now "restricted to

a few small railroads, the majority of Massachusetts electric light and gas companies, most small and medium-sized cotton mills, locally owned manufacturing companies, banks, insurance companies, and mines. There have been in almost every case some special reasons tending to hold back these types of industry from developing the more elaborate form of capitalization. Until recently the tax laws in Massachusetts levied a general property tax on bonds, but not on stocks, so that gas companies, electric light companies, and even cotton mills, found a readier sale for their tax-exempt stocks among local capitalists."

FULL-PAID AND NON-ASSESSABLE STOCK.—Full-paid stock is stock for which value has been received equivalent to its par value. In most states stock may be issued for cash, property or services, and so long as the officials of the corporation act in good faith and take the property or services at what they deem a fair value, the stock is considered full paid and non-assessable. Such stock is usually **free from any liability.** In case of insolvency the investor loses his original investment but cannot be held by the creditors of the corporation. In California, and possibly one or two other states, the owner of full-paid stock is still liable to creditors of the corporation for his share of the deficit in case of insolvency. Certificates of common stock usually have stamped or printed thereon "Full-paid and non-assessable."

The advantage of issuing non-assessable stock is that it is more easily sold than assessable stock. Experienced investors are reluctant to purchase assessable stock on account of the contingent liability that is attached to it.

FULL-PAID STOCK SOLD AT A DISCOUNT.—Where a corporation cannot sell its stock to investors at par it may be compelled to sell it at a discount. Purchasers might not buy this stock even at a discount if they would be subject to assessment for the discount in case of insolvency. In order to overcome this difficulty, as well as the requirement of the laws of some states that stock must be issued at par, a number of subterfuges are resorted to such as the company arranging to issue a large quantity of stock in payment for certain property with an agreement that part of it is to be donated back to the company. As this stock is originally issued at par for the property and donated to the company, it becomes treasury stock and may be sold at any price the company can obtain for it.

ASSESSABLE STOCK.—Assessable stock is stock which has not been fully paid for by the subscriber and which is liable for further assessment up to the par value. The liability for assessment of such stock may be due to the fact that the stock was issued and payments were to be made on instalments, all of which have not been paid, or it may be that the stock was sold at a discount and the stock issued to the purchaser at less than par.

The **laws of most states** provide that in case of insolvency the purchaser of stock is liable to creditors for the difference between the par value and lower issue price.

RESTRICTIONS ON THE SALE OF STOCK.—Sometimes stockholders of small, close corporations agree among themselves to withhold their stock from outsiders. Where such agreements rest on a valid contract they are enforcible between the stockholders, but would be ineffective to any outsiders who purchase such stock without notice and in good faith.

Close corporations sometimes attempt to restrict the sale of their securities by setting forth in their by-laws and in the stock certificates that stockholders are prohibited from selling their securities to anyone not already a stockholder, or prohibiting the sale of the securities without the consent of the directors,

or unless it has been offered to the directors at a price not greater than that at which it is later to be offered to outsiders. Such provisions are illegal and not enforcible in so far as they attempt to prevent sales at any price. But if the conditions are set forth in the stock certificates and merely confer an option which if not exercised frees the stock from all conditions, the provisions are legal.

SPECIAL TYPES OF STOCK.—

Guaranteed Stock.—This is stock of a company the dividends of which are guaranteed by another company. Generally, this guaranty is given in return for the use by the guarantor of some property owned by the corporation whose stock is guaranteed. This condition is frequently found among railroads but only occasionally in industrial companies.

Founders' Stock.—This type of stock is more frequently met with in England than in the United States. It is generally retained by the original organizers of a corporation and carries with it certain privileges not accorded to other shares, generally consisting of special voting rights and greater dividends than are accorded to other kinds of stock. Such issues are usually relatively small in amount as compared with the remaining capitalization. Frequently founders' shares carry with them the provision that after preferred stock dividends are paid the remainder is divided equally between the common stock and the founders' stock. On account of the comparatively small amount of the issue such stock may have a very high potential and speculative value. The Armour Leather Co. and the Amalgamated Coal Co. of Pittsburgh, both incorporated under the laws of the state of Delaware, are among the few American companies having founders' stock.

Junior Preferred Stock.—At times a corporation may issue two classes of preferred stock, generally known as **first preferred and second preferred.** As a rule the first preferred is entitled to certain dividends before any are paid to the second preferred. The latter, however, has a preference as to dividends over the common stock.

Such junior preferred stock is seldom issued when a corporation is organized but is often necessary in cases of consolidations, reorganization or refinancing. The return that must be offered to second preferred stock must usually be higher than that offered the first preferred stock.

Class A and Class B Stock.—Sometimes corporations may divide the common stock into two or more classes, generally designated as Class A and Class B stock. One class has certain rights and privileges not enjoyed by the other and where there is no preferred stock it will often be found that the Class A stock is really preferred in everything except the name. An illustration of Class A and Class B common stocks may be found in the case of the Bethlehem Steel Corporation where both classes have exactly the same rights except that Class B stock has no voting power.

TREASURY STOCK.—Treasury stock is stock lawfully issued by the corporation for money, property or services, and **reacquired by purchase or donation.** Such stock may be sold by the company for any price and on any terms it may obtain. The sale of such stock at a discount will not subject the purchaser to liability for the unpaid balance.

UNISSUED STOCK.—Unissued stock represents part of the authorized capital stock of a corporation which has not been issued. Such stock does not represent an asset but merely a right which can be exercised in the issue of stock for money or property, usually at par, when the corporation may deem

its issue expedient or necessary. Unissued stock should not be confused with treasury stock and to show unissued stock on a balance sheet as treasury stock is erroneous.

AUTHORIZED STOCK.—The certificate of incorporation states the amount and kinds of capital stock the corporation is authorized to issue. This is known as the authorized capital stock. Any issue of stock beyond the amount authorized is void, as it is beyond the power of the corporation to issue it and can in no way be validated.

At the time of organization the corporation should obtain authority to issue a larger amount than it needs at the time and to issue capital stock as the company expands. If this is not done and subsequent development of the company demands larger capital stock issues, it may be inconvenient and difficult to obtain it as it is necessary to obtain the consent of the present stockholders and the state authorities for such additional stock issues.

VALUES OF STOCK.—Stock may be said to have five values:

1. Market value
2. Book value
3. Real value
4. Par value
5. No par value

Market Value.—The market value of stock is the price it can be sold for in the open market by a willing seller to a willing buyer. This value may be influenced by its book value, the earning power and general credit of the company, and the condition of the investment market for such securities.

Book Value.—The book value of stock is the value determined by the books of the issuing corporation. To ascertain this value in the case of a company with only common stock outstanding divide the net worth of the company by the number of shares outstanding, the net worth of the business being determined by the excess of the total assets over the liabilities. If a company has issued preferred as well as common stock, the book value of the former is the amount of its claim per share to the assets in the event of liquidation plus any accrued and accumulated dividends; the book value of the common is ascertained by dividing the remainder of the net worth by the number of issued shares.

Real Value.—The real value of stock is its actual value which may be the book value if all the values stated on the books are accurate. But as the earning power of the corporation influences the value of the stock, its real value may more closely be determined by its market value under normal conditions. In the final analysis the market value determines the real value, to the corporation as well as to the investor, more closely than any other consideration.

Par Value.—The par value of a stock is the amount stated in the certificate. The corporation laws of most states permit the issuance of stock of any par value desired. In a few states there are limitations. In New York the par value may not be less than $5 nor more than $100 a share; in Illinois a par value of less than $10 a share is prohibited. In New Jersey any par value may be chosen.

Generally, corporations have the same par value for all classes of stock except where they issue one class of stock at no par value. Most of the railroad and industrial corporations have issued stock of a par value of $100. Some of the older railroads, among which are Delaware, Lackawanna & Western, Pennsylvania, Lehigh Valley, and Reading, have stock with a par value of $50.

The tendency in many industrial corporations is to place a low par value

upon their stock in order that sales to small investors may be facilitated. Some of the largest industrial corporations have issued stock with a par value of $50 a share. Among these are the Westinghouse Electric & Manufacturing Co., United Gas Improvement Co., etc.

No-Par Value.—When shares of stock have par value, this par value theoretically expresses the amount of the stockholder's original investment. The real value of a share changes with the changing fortunes of the enterprise. Since each share represents a proportionate interest in net worth of an enterprise there has arisen recently a demand for stock of **no-par value.** No-par shares do away with the meaninglessness of "par value," avoiding any supposition that there is an equivalence between actual values and par value of stock. The following is from the report of the Hadley Railroad Securities Commission:

"We do not believe that the retention of the hundred-dollar mark, upon the face of the share of stock, is of essential importance. . . . . It is less in accord with existing business habits and usages; but it has the cardinal merit of accuracy. It makes no claim that the share thus issued is anything more than a participation certificate."

Stock of no-par value was first authorized by the state of New York in 1912. Since that time a number of other states have followed New York. At present practically every state of the United States authorizes the issuance of no-par value stock.

From present indications the number of corporations issuing stock of no-par value will rapidly increase. In 1919, there were listed on the New York Stock Exchange 27 corporations which issued stock of no par value. In 1924 the number had grown to 189.

ADVANTAGES OF NO-PAR STOCK.—Among the more important adtages of no-par stock are:

1. **Flexibility in financing.** The company may sell its shares at whatever prices it may obtain depending upon its condition as well as on general financial and business conditions. A sound corporation may sell its no-par value stock on terms which will attract investors without causing unfavorable comment which would be likely when par value stock is sold at a discount.

2. **Stock full-paid and non-assessable.** In the absence of fraud a no-par stock sold by the company is full-paid and non-assessable regardless of the amount the company received for it. This does away with the difficulties and subterfuges resulting from the necessity of exchanging stock for property greatly overvalued in order that part of the stock may be donated back to the company so that it may be legally sold at a discount.

3. **It is elastic.** Book values can be adjusted when necessary.

4. **Is more truthful.** As no-par value stock as carried on the books represents the net worth, it is a more accurate statement of its value than par value stock whose par value bears no relation to either the market value or the book value.

5. **Investors put on their guard.** The value of any stock depends on the assets and earning power of the corporation. Par value is primarily a legal fiction which has no relation to the market or book value of stock. The psychology of par value has a tendency to mislead investors. With no-par value stock an investor is put on his guard to ascertain the value of that stock by making a study of the balance sheet and earning power of the company.

DISADVANTAGES OF NO-PAR STOCK.—A number of alleged disadvantages have been advanced against the use of no-par stock. As these are mostly

based on a failure to understand the purpose of such stock or a prejudice against their use, they may be mentioned only briefly:

1. **Novelty.** The use of no-par value stock is comparatively new and has custom against it. This is not a valid objection.

2. **Dangerous speculation.** The issue of such stock may lead to a reckless output of shares and thereby cause dangerous speculation in the securities. This objection is offset by other factors. First, the number of shares the company is authorized to issue is limited by the articles of incorporation. Second, the self-interest of the corporation tends to limit the number of shares issued at a price to the best advantage of the company. Third, the investor is put on inquiry before purchasing such stock.

3. **State taxation.** In a number of states the shares are taxed on the basis of par value. Many states have adjusted their laws to meet the situation and tax such shares on the issue or book value.

4. **Unstandardized treatment on balance sheet.** This objection is not against the use of no-par stock, but rather against unstandardized accounting methods. The accounting treatment of no-par stock is mentioned for purposes of information and not for purposes of argumentation.

NO-PAR STOCK ON THE BOOKS.—Stock of no-par value may be carried on the books in a number of different ways, as follows:

1. At the issue price.
2. At an arbitrary fixed price.
3. At its book value, which is found by dividing the net worth of the company by the number of shares outstanding.
4. At the market price.
5. At a nominal figure.
6. At a figure which combines the surplus and issue price into one amount.

In the first five methods a separate account is kept for surplus through which all adjustments for earnings and losses are made.

THE VALUATION OF COMMON STOCKS.—The question "How much is this stock worth?" is usually answered with reference to a number of different factors, chief of which are:

1. Earning power
2. Dividend policy
3. Financial condition
4. Management
5. Nature of business
6. Industrial outlook (general and particular)

Dividends and Earnings.—Since companies are organized for the primary purpose of paying dividends, the value of stocks should be measured largely by their dividend rates. But the absence of any uniform practice in adjusting the dividend rate to the earnings has greatly detracted from the usefulness of the former as an index of intrinsic worth. This is especially true among industrial corporations where the frequent sudden changes in dividend declarations have led investors generally to attach more importance to the amount earned than the amount paid per share.

Where dividend rates are longer established—as in the case of railroad stocks—they exert a more controlling influence on market prices. The tendency of investors to assume the continuance of the previous payment, without much attention to the trend of earnings or the cash position, often leads to unpleasant surprises. Earning power and financial strength are of more importance than the current dividend rate, even among the old line railroad issues.

The Cash Position.—Experienced investors do not attach overmuch significance to the figure at which the **fixed assets** are carried in the balance sheet. This item often includes an unstated but generous allowance for intangibles, and in any case, the true value of a plant or mine is measured chiefly by what it can **earn.** But the exhibit of **current assets and current liabilities** is of prime importance, because of its bearing upon both the dividend outlook and the need of new financing.

The best managed companies are careful to maintain a strong liquid asset position, in anticipation of emergency or expansion requirements. While recourse to temporary borrowing may enable other enterprises to do business on a smaller capital and thus show a larger percentage of earnings, this advantage is secured at the sacrifice of conservatism and reserve financial strength.

The Question of Reserves.—The most significant figure in every income report is the **balance available for common dividends,** from which is found the amount earned per share. But this result is often made to appear either more or less favorable than is actually the case, by under or over stating the deductions for reserves. Reserves are provided for many purposes, such as:

Taxes	Shrinkage of inventories or plant values
Depreciation and depletion	Bad debts
Contingencies	

There is wide variance among corporations in the treatment of each type of reserves, a fact which requires careful attention in comparing the final results shown by their statements. The 1919 report of U. S. Steel, for example, indicated a balance available for the common stock equivalent to about $10 per share. But the corporation had previously charged against earnings a total of $77,000,000, or $15 per share, to reduce the cost of its inventories and its plant additions to pre-war levels. Since the other large steel producers made no similar reserves, it is clear that for comparative purposes, U. S. Steel really earned about $25 per share in 1919.

All mining companies are allowed to set up a reserve to cover estimated ore **depletion,** before computing earnings subject to federal taxes. Some copper producers do, while others do not, deduct this reserve from their earnings as reported to their stockholders—the two practices being illustrated by Kennecott and Utah respectively. For a proper comparison of the earning power of these companies, the depletion reserve must of course be added to the final net profits reported by Kennecott.

It is of prime importance to make sure whether full provision for income and excess profits tax has been made in stating the earnings available for the common shares. Where no tax reserves have been set up, as in the case of the B. F. Goodrich report for 1919, the stockholder must allow for an indefinite but substantial reduction from the indicated profits.

The Capitalization Structure.—Two companies with the same total capitalization and the same net income may yet show a very divergent rate of earnings on their common shares, merely because of a different proportion of preferred stock (or bonds) to common stock. Let Companies A and B each have $20,000,000 of capital stock and let each earn $4,000,000 net. Company A, however, has half of its capitalization in preferred and half in common stock, while B has only common stock. After deducting $700,000 for preferred dividends, A will earn $3,300,000 or 33% on its common; but B evidently earns only 20% on its capital stock. Superficially A makes a far better showing, yet the basic facts are the same for both companies. For if it so desired, B

could bring its earnings per share up to those of A by merely issuing preferred stock in exchange for half of its present capital.

In comparing the earning power of different issues this important element of **financial structure** often escapes attention. Many companies with top-heavy capitalizations have made a deceptively strong showing for their common stocks during the recent prosperous years because there were relatively few junior shares to divide the large surplus profits. But conversely, in times of depression these companies may have difficulty in meeting their interest and preferred dividend requirements, and the balance applicable to the common shares will shrink with remarkable rapidity.

Low Costs versus Large Output.—This summarizes another element of great practical importance in valuing common shares. High cost producers are benefited most by advancing prices; low cost producers are hurt least by falling prices. In times of rising prices and abnormal net profits, the higher cost producers are usually overvalued as compared with the low cost companies, while in times of depression, just the opposite is the case.

Rights and Liabilities of Stock Ownership

VOTING.—It is customary to give one vote for every share of common stock. Preferred stock is entitled to vote likewise unless there is an express provision to the effect that preferred stock has no voting power. Often such stock is denied voting rights and the right to participate in stockholders' meetings. In California, the statutes provide that no preference may be granted to any class of stock. Stockholders may vote **in person or by proxy.** Notices of annual meetings are mailed to stockholders. Proxies are sent with the notices by means of which the stockholder may authorize some officer of the corporation, usually the secretary, to cast his vote if the stockholder cannot attend in person. It is customary to request that the stockholder forward his proxy, and for that purpose a stamped envelope is usually sent him. The stockholder signs the proxy and returns it. In practice many proxies fail of return because of the stockholders' lack of interest. Frequently at stockholders' meetings there are present the secretary and one or two other officers who carry out the usual formalities, elect a chairman and a secretary, make the usual reports, cast the votes, and carry out a program already agreed upon.

VOTING TRUSTS.—A voting trust is the result of an agreement under which a majority of the voting stock of a corporation is placed in the hands of trustees for a fixed period, who are authorized to vote the stock in accordance with the limitations prescribed by the agreement creating the voting trust. The voting trustees usually issue certificates, called **"voting trust certificates,"** which are issued to the stockholders in exchange for their stock.

Voting trusts may be created for—

1. **Control.** A group of stockholders who control a corporation may wish to assure the continuance of such control. This can be accomplished by an agreement among the stockholders creating a voting trust.

2. **Permanent management.** Stockholders of an embarrassed or reorganized corporation, in order to preserve continuity of responsible management and protect the interests of all stockholders, may do so through a voting trust.

3. **Carry out judicial decree.** In order to carry out a judicial decree requiring definite action on the part of the stockholders, the law may create a voting trust to enforce the decree.

CUMULATIVE VOTING.—Cumulative voting is that method of voting at elections of directors by virtue of which a stockholder is entitled to as many votes as equal the number of his shares of stock multiplied by the number of directors to be elected, all of which votes may be cast for a single director or distributed among any two or more of them.

In Pennsylvania the right to vote in this manner is given to stockholders by the Constitution. In Delaware, New Jersey, and New York it is permitted where provision therefor is contained in the certificate of incorporation.

RULES AND FORMULAS FOR CUMULATIVE VOTING.—

First Rule.—To ascertain how many votes a stockholder may cumulate on a particular number of directors, multiply the whole number of directors by the number of shares held and divide by the number to be cumulated on.

Second Rule.—To determine the minimum number of shares a person must hold or control to elect a certain number of directors, multiply the whole number of shares by the number of directors it is desired to elect and divide by the whole number of directors plus one and add one share, disregarding the fraction if any.

Third Rule.—To determine how many directors a stockholder or group of stockholders holding a certain number of shares may elect, multiply the whole number of directors plus one by the number of shares held and divide by the whole number of shares, disregarding the fraction, if any.

There are many opportunities for surprise where cumulative voting is allowed, and, unless careful, the holders of a majority of the stock may lose control of the company. Thus, in the case of 1,000 shares voting and 5 directors to be elected, if the holders of only 376 shares should cumulate their votes on 3 candidates and the holders of the remaining 624 shares should cast a straight vote for 5 directors, the holdings of the 376 shares would be successful, as they could cast 626 votes for each man on their ticket as against the 624 votes received by each of the majority candidates.

STOCK RIGHTS.—The privilege extended to stockholders to subscribe to new stock is known as a "stock right." It is evidenced by a **warrant** which resembles a stock certificate. These rights are transferable and are bought and sold in the open market. The right to subscribe is on a pro rata basis, say, for example, 1 share of new for each 4 shares of old stock.

Usage varies as to the **definition** of a single stock right. Sometimes it refers to the privilege of subscribing for 1 new share. Sometimes, as in New York, it refers to the subscription privilege attaching to each share of old stock.

Under the laws of most states the stockholders of record of corporations have a **pre-emptive right** to subscribe to new issues of capital stock or to funded debt which may be, by its terms, convertible into capital stock. The proportionate rights accruing to any stockholder depend upon the number of shares held, the amount of new stock to be issued and the price at which the new stock will be issued.

These factors are illustrated as follows: A corporation with an outstanding capital stock issue of $24,000,000, consisting of 240,000 shares of a par value of $100 a share, wishes to raise $12,000,000 by the sale of capital stock. If the stock is offered at par, each shareholder will have the right to buy one share for every two shares held by him. If the stock is offered at $120 a share, the corporation will need to sell only 100,000 shares and the stockholders will then have the right to buy one new share for every 2.4 shares held.

Stockholders may waive their right to subscribe to new issues of stock by suitable provision in the charter or by-laws.

The time during which the rights may be exercised is generally prescribed by the corporation. The exact time varies according to the nature of the company, the distribution of stock ownership, the condition of the investment market and the wishes of the corporate officers. Generally, where the stock is closely held, the life of the rights is comparatively short. The opposite holds true for stocks which are widely distributed.

THEORETICAL VALUE OF STOCK RIGHTS.—A corporation with common stock outstanding of $10,000,000, par $100, selling at $125 per share, gives its stockholders the right to buy $2,000,000 new common stock at par in the ratio of one new share for each five old shares held. The theoretical value of the rights will not be $25, the difference between market and subscription price, for the new issue will cause a dilution of the equity represented by each share. Mathematically the theoretical value of a right may be calculated as follows:

Before issue of rights:		
Shares of stock outstanding	100,000	
Market value per share	$125	
Total market value		$12,500,000
Rights issued:		
20,000 shares sold at $100 a share		2,000,000
Total value after new stock is sold		$14,500,000
Value per share after new stock is sold $14,500.000 ÷ 120,000		$120.83

The right (five of which are required to buy one new share) is theoretically worth 1/5 the difference between $100, the subscription price of the new shares, and $120.83, the probable market price after the new stock is out, or $4.16.

If m is the market price of the old stock, s the subscription price of the new, and n the number of old shares carrying the subscription to one new share, then t, the so-called theoretical value of the right, is equal to:

$$\frac{m-s}{n+1}$$

The **actual market value** of the rights fluctuates with the market value of the stock and tends to equal the theoretical values because of arbitrage dealings between the stock and the rights, whereby brokers reap profits by simultaneously purchasing the rights and selling the stock short, then subscribing to the new stock and subsequently making delivery against this sale when the certificates for the new stock are available. A better term to apply to the so-called theoretical value of rights is **parity value** since when the market value of rights equals this value, it is at parity with the market value of the stock, and no profit is to be made in arbitraging between the rights and the stock.

STOCK ISSUED AT PREMIUM.—Stock issued at a premium does not give the stockholders who may have paid this premium, any additional rights. The premium becomes part of the **paid-in surplus** of the corporation. This premium can not be recovered by the stockholders and on dissolution the rights of all stockholders of the same class to share in the distribution of corporate assets are equal, regardless of the fact that some may have paid a premium on the stock when issued.

TRANSFER OF STOCK.—Stock certificates show on the face the number of shares represented, to whom they were issued, and the legal conditions under which issued. Stock certificates are transferable, and when indorsed in blank by the person to whom issued, are negotiable. They sometimes pass through many hands before being transferrred on coporation's books. Dividends are paid to stockholders of record. One purchasing shares should attend

at once to their transfer, although if the dividend is paid to the previous holder who sold it before it became ex-dividend, the purchaser has recourse against him for the amount of the dividend.

Issuance, transfer, and handling of capital stock, in case of large corporations, are entrusted to a **transfer agent** and a **registrar.** The transfer agent sees that the record of stockholders is kept up to date—that when transfers are made old certificates are canceled and new ones issued. The registrar checks the issuance and sees that the total does not exceed the amount authorized to be issued.

Borrowed Capital

CORPORATE CAPITAL.—Corporate capital may be divided into two classes, borrowed capital and owned capital. Borrowed capital is generally provided by creditors in the form of bonds and corporate notes. Owned capital is that which is furnished by stockholders and is represented by capital stock issues.

The foregoing classification of corporate capital is for convenience of discussion of corporate finance, although not correct in an accurate or legal sense. The issue of bonds and notes establishes a relation of debtor and creditor between the corporation and the holders of such obligations. Capital stock issues on the other hand establish a proprietorship relation between the corporation and the stockholders. The rights and liabilities of each class are distinct and in a measure in conflict with one another. The proper distinction is between actual or true capital, that is, funds at the risk of the business, and borrowed capital, which is a liability and which must be discharged before actual capital has any claim to the assets.

ADVANTAGES OF BORROWED CAPITAL.—There is no method of raising funds which is cheaper than borrowing. A corporation should borrow as much as it can within the limits of safety, if it can use this capital to advantage.

The great advantages of borrowing are economy and convenience. With modern credit facilities funds can be borrowed for corporate purposes in a comparatively easy manner and at cheaper rates than can be secured through capital stock issues. Generally, first-class bonds can be sold by the issuing company on a basis to yield 5 to 7%, whereas preferred stock of the same standing must be sold on a 7 or 8% basis. When money can be borrowed at say 5% and can be used to earn a considerably larger return, borrowed capital becomes profitable. Owned capital then receives a higher return than when borrowing is not resorted to. In some instances, particularly among public utility corporations, a large proportion of the total capital is borrowed, which accounts for the reason that the common stockholders of many such companies can receive a comparatively large return on their investments. In such cases the greater part of the capital is furnished through borrowed capital, i.e., bond issues.

DISADVANTAGES OF BORROWED CAPITAL.—The chief disadvantage of borrowed capital is the increased risk to owners of capital stock, especially in corporations whose earnings fluctuate widely from year to year, and where conditions necessitating even a temporary cessation of interest payments on this borrowed capital would probably bring on a receivership. For this reason industrial corporations prefer to raise most of their capital through stock issues rather than by borrowings. In the case of public utilities where earnings are more stable, a greater proportion of the capital may be raised through borrowings.

RULE FOR BORROWED CAPITAL.—It is impossible to lay down exact rules as to the proper proportion of borrowed capital which would hold good for all concerns. In general, however, capital should not be borrowed except in cases where the earning capacity is such that the concern can surely pay the interest charges out of current earnings and meet the principal at maturity.

Borrowing on short-term bank loans may be resorted to when the **ratio of current assets to current liabilities** is two to one or greater. In long-term borrowing the condition of the concern and the particular business in which it is engaged, must govern each particular case. Generally, however, it may be said that the capital funds should not be borrowed unless there is a practical certainty that both interest and principal payments can be met when due. In putting this rule into practice, the minimum earnings during periods of industrial depression should be equal at least to the interest requirements. A basis which is frequently followed is that the average earnings over a considerable period of time should be at least **twice the interest requirements.** Under such conditions the interest payments are assured with sufficient margin to provide for the retirement of the bonds at maturity. In addition, bank borrowing should only be resorted to in order to carry the company over the peaks of its seasonal credit requirements. At least once a year, the company should be completely free from bank debts.

SOURCES OF BORROWED CAPITAL.—Borrowed funds may be obtained in two ways—(1) by contracting fixed liabilities, and (2) by contracting current liabilities. The fixed liabilities or funded debt of a corporation may be classified as bonds payable, and long-term notes payable. The current liabilities may be classified as creditor's accounts, bills payable, bank loans, etc.

TRADING ON EQUITY.—The phrase "trading on equity" has become popular in discussing corporate finance and refers to the practice of increasing the profit of a corporation by borrowing funds at rates of interest which are lower than the rate of profit which can be earned in the business of the borrower. For instance, if a manufacturer can make 12% net profit in his business and can borrow money at 6%, he makes 6% on all he can borrow and thereby increase the profit on his business. There are certain limitations, however, beyond which it is dangerous to carry this policy. If, for instance, in a year of depression he can earn only 4% on his total invested and borrowed capital, and his borrowed capital cost him 6%, he may earn less for himself than as if he had not borrowed at all.

SHORT-TERM AND LONG-TERM SECURITIES.—Although the distinction between short-term and long-term securities is not always clear, obligations having not more than 5 years to run are usually regarded as short-term, while those running over 5 years are classed in the other group. Long-term obligations usually take the forms of mortgage bonds, collateral trust bonds, or debenture bonds.

Whether to issue long or short term securities will be decided first by the character and condition of the company and second by the condition of the investment market. Short-term securities should be issued, as a rule, when the immediate situation leading to the necessity for the issue of such securities is of a temporary nature which in the normal course of business will provide the means of repayment. In other words, short-term securities should be issued for self-liquidating obligations. Long-term securities should be issued as part of the permanent borrowed capital to finance the purchase of part of the permanent assets, such as the plant and equipment of the corporation.

The use of **short-term obligations in anticipation of long-term borrowing**

may be a sound financial policy to follow under certain circumstances. During periods of high interest rates it is desirable for a business in need of permanent borrowed funds to issue short-term notes extending over 3 to 5 years in the hope that interest rates for permanent securities will drop by the time the short-term notes mature. These can then be replaced by the long-term bonds which can be floated at a lower interest rate.

SIZE OF BOND ISSUE.—The first question presented to the financial executive when a bond issue is under consideration is: How large should the bond issue be? The answer will be governed by a number of factors which may vary according to the nature of the business and condition of the investment market. Some of the principal factors to be considered in deciding this question are the following:

1. The Character of the Business.—A business dealing in a necessity of life is likely to be more stable than a speculative company or one dealing in articles of luxury. When a business of the former type is profitable, it may with reasonable safety issue a comparatively large bond issue because the probabilities of earning the required fixed charges for interest and sinking fund are favorable. In a speculative enterprise bonds should not be issued or, if at all, only for a comparatively small amount, depending on the degree of uncertainty of the earnings. Bonds of such a concern are hard to sell and generally must be offered on terms which will be costly to the company. The uncertainty of earnings of such a business may make it hazardous to burden it with large fixed charges for interest and sinking fund purposes.

2. Age of the Business.—A new concern does not possess adequate data on which to base an estimate of its ability to pay fixed charges. Such a business should observe a very conservative policy and confine its capital issues to capital stock because a failure to earn and pay dividends will not bring about receivership and reorganization which is likely in the event of its inability to pay interest charges on bonds.

A business of a few years' standing may secure funds by a relatively small bond issue provided the fixed charges do not exceed the lowest net earnings in the concern's history. The average net earnings over the period of its existence should be from four to six times the interest charges.

A business with a number of years of successful operation behind it has sufficient data on its earning power to enable it to gauge fairly accurately how much it can meet in fixed charges with reasonable safety. A conservative policy is that the fixed charges should not, at the outside, exceed one-half the average net earnings of the business during the period of its existence. Where the earnings have grown rapidly as the business expanded, an average of the more recent years may be accepted. Where a concern has built up a large surplus which is retained in the business and has created adequate reserves, both of which are offset by liquid assets, a heavier fixed charge for interest may be incurred than in a case where these elements of safety are lacking.

3. Effect of Business Cycle on the Business.—A factor to be considered in every proposed bond issue is the degree to which the business is subject to the fluctuations of the business cycle. A concern which recovers quickly after a period of deflation, other things being equal, may employ with safety more borrowed capital than a concern which cannot recover so quickly. Where the earnings are relatively stable during all phases of a business cycle, a margin of safety of two to one, which means the earnings are two times the interest requirements, for a period of 10 years, is adequate. A concern where the earn-

ngs are likely to fluctuate extensively with possible losses, the average net earnings should be from six to ten times the interest charges, depending on the financial condition of the particular concern.

RATIO OF BONDS TO VALUE OF PROPERTY.—The ratio of bonds issued to the value of the property which secures the debt is an important item for the financial manager to consider. Bankers in bringing out a bond issue invariably inquire into this ratio and emphasize it in their advertisements. Although this ratio varies widely, the **ideal percentage** is from 50 to 60%. An old well-established business in a staple line may increase this percentage to some extent, while in speculative concerns the percentage permitted would be less.

From the foregoing data a **general rule** may be formulated that the more speculative and uncertain the business, the larger the margin of safety of property values must be over the amount of the mortgage issued to secure the bonds. The salability of the plant, and its adaptability to other purposes, are factors of great importance in such a consideration. A concern having a well located plant with property of a salable character and engaged in a staple business with considerable certainty of earnings may with safety issue bonds to an amount representing a higher ratio to the value of the property, than a company engaged in manufacturing a specialty in a plant which could not readily be sold or used for other purposes.

OPEN AND CLOSED BOND ISSUES.—Corporate bond issues may be closed, open-end, or limited open-end issues. A **closed issue** prohibits the authorization and issue of bonds in addition to those being immediately issued. An **open-end issue** allows the issue of any amount of bonds in the future under certain requirements, in addition to those first issued. A **limited open-end issue** places a maximum limit on the amount of bonds that may be issued under a mortgage and usually defines the conditions under which the bonds not being immediately issued may be put out in the future.

BEST TYPE OF BONDS FOR CORPORATION.—The limited open-end bond issue is probably the most satisfactory type of bond issue for a corporation, although not always the most salable. In the case of a mortgage containing an after-acquired property clause the investor is safeguarded in that the mortgage becomes a lien on all the after-acquired property, provided that the reserved bonds are only permitted to be issued for a conservative percentage of the value of the new property. Generally the after-acquired property clause covers only property acquired for the operation of the business and does not cover stocks and bonds.

USUAL LIMITATIONS ON LIMITED OPEN-END BOND ISSUES.—McKinsey and Meech, in "Controlling the Finances of a Business," give the following typical limitation which may be placed on the issuance of additional bonds under a limited open-end mortgage:

"1. A **maximum amount** may be named in the deed of trust. That is, a maximum amount of bonds may be authorized, part of them issued at once, and the remainder may be later issued under certain conditions as in (2) following. This clause has the advantage of definitely assuring the investor as to the amount of bonds with which he must share his lien. It has the disadvantage of unnecessarily limiting the ability of the company to issue bonds under a first mortgage, and of thus hampering financial operations.

"2. No maximum limit may be set in the deed of trust, but the issuance of additional bonds may be made conditional upon the existence of certain circumstances as follows:

"(a) Additional bonds may be issued only up to, say, 75 or 80% of the sound value of new property acquired, and then only if **net tangible assets** at their sound value are equal to, say, 200% of the par value of bonds outstanding and to be issued, provided that **net current assets** are maintained at 150% of bonds outstanding and to be issued, and provided further that **average net earnings** for three years immediately preceding are at the rate of two or three times the interest and sinking fund charges on bonds outstanding and to be issued.

"(b) Additional bonds may be issued up to 75 or 80% of the cost of additions, betterments, and improvements, provided also that conditions such as those named in the foregoing paragraph exist.

"(c) Additional bonds may be issued up to 75 or 80% of the cost of additions, etc., upon consent of the holders of three-fourths of the bonds already outstanding. Limitations such as those suggested in (a) above may be added in this case.

"(d) New property subject to outstanding mortgage bond issues may be acquired by issuance of additional bonds under this mortgage (i.e., the limited open-end mortgage of the purchaser), but such old bonds outstanding on new property acquired must be retired or refunded and placed as security for the bonds issued to acquire the new property.

"The limitations suggested above under (2) are more satisfactory than those outlined under (1)."

DANGER OF THE AFTER-ACQUIRED PROPERTY CLAUSE.—The after-acquired property clause which is frequently found in both closed and open-end mortgages, may, under certain circumstances, hamper the corporation in its future expansion and financing. For this reason this clause should be used with discretion.

Thus, if a concern puts out a bond issue secured by a closed mortgage containing the after-acquired property clause, that concern cannot issue any more bonds under the given mortgage, and cannot place a mortgage equal or prior in lien to the closed mortgage on any new property later acquired or proposed to be acquired. In short, the business, other things being equal, cannot finance in the future by a first mortgage bond issue. It can place a second mortgage on its property, but second mortgage bonds will typically sell to yield a higher return, i.e., capital secured by second mortgage bonds will typically cost more than that secured by first mortgage bonds. Furthermore, if the definition of property is so worded as to include stocks, bonds, and other securities, a collateral trust bond issue is precluded. The corporation can still issue debentures or short-term notes, but probably at higher rates.

Bonds and Notes

MEANS OF CORPORATE BORROWING.—A corporation may borrow money in the investment market by issuing **long-term or short-term funded debt.** There is no distinct line of demarcation between the two. In investment circles short-term securities usually refer to obligations having not more than 5 years to run and long-term securities are those running for more than 5 years.

When the corporation desires to borrow for a short term, 5 years or less, it usually issues unsecured notes. For longer periods secured bonds are more frequently used, although many unsecured bond issues, frequently called "debentures," are issued.

FUNDED DEBT DEFINED.—Funded debt, falling generally into the main classifications of **bonds, debentures,** and **notes,** is represented by a formal written agreement, signed and sealed, which evidences the obligation of the maker to pay a definite sum of money at a specified place, on a specified date with interest at a stipulated rate. The terms and conditions under which the funded debt is issued, are contained in a more or less elaborate agreement, between the issuing company and a trustee, reference to which is made in the bond, debenture, or note. These references, however, are not to the method of payment of principal or interest as that would tend to affect the negotiability of the funded debt. The agreement may be referred to as the "mortgage," "deed of trust," "trust agreement," "trust indenture," etc., in appropriate cases.

SECURED FUNDED DEBT.—Usually there is either a pledge of certain real property under a **mortgage** as security for the payment of principal and interest, or in the case of **collateral trust issues,** certain collateral, consisting of securities, is pledged with the trustee. There is almost an infinite variety of permutations and combinations which can be found in the underlying security, ranging all the way from an unsecured note to a first closed mortgage bond.

DENOMINATIONS OF BONDS.—The denomination of a bond is the definite amount stipulated on its face which the company issuing it promises to pay at maturity. Denominations vary, although a par value of $1,000 is usual. In recent years there has been a tendency to issue a great many bonds of a par value of $500 and $100 in order to appeal to the small investors. Bonds with a par of $100 are usually called "baby bonds."

NATURE OF SECURED BONDS.—The customary form of corporate mortgage bonds sold to investors are obligations of the issuing company and constitute a contract wherein the holder has a right to participate in an agreement entered into by the company with a trustee who holds the legal title to the mortgage issued to secure the bonds.

There are **two parts to each bond.** First, there is the mortgage issued by the company to the trustee. Second, there are the bonds, issued under the agreement and signed in the name of the corporation, with the certification by the trustee that the bond is covered by the agreement. These instruments specify in detail the nature of the obligations, the duties of the trustees and the rights of the bondholders. There is a definite promise to pay the principal at maturity and a fixed rate of interest periodically. The place of payment is also stated, usually a bank or trust company. The **security** for the bond is usually described in abbreviated form.

The money paid to a corporation for its bonds is merely a loan and creates the relation of debtor and creditor between the company and the bondholder.

BONDS PAYABLE IN GOLD.—Many bonds are specifically payable in gold coin of certain weight and fineness. This provision is very important in long-term bonds and in countries in which there is danger of fluctuation in the value of the national currency.

CLASSIFICATION OF BONDS.—Many kinds and varieties of bonds are issued. Generally speaking, bonds **receive their titles** from one or more of the following characteristics:

1. The character of the issuing corporation.
2. The purpose of the issue.
3. The nature of the security given for payment.
4. The terms of payment.

5. The evidence of ownership and transfer.

A classification will be given under each of these heads.

BONDS CLASSIFIED AS TO CHARACTER OF ISSUING CORPORATION.—This characteristic is used as a basis for general classification. That is to say, market quotations are sometimes arranged under the following heads:

1. Government—state and national
2. Municipal and county
3. Railroad, express, and steamship companies
4. Traction companies
5. Gas, electric light, and water companies
6. Banks, trust companies, and insurance companies
7. Investment companies
8. Industrials
9. Mining companies
10. Miscellaneous

BONDS CLASSIFIED AS TO PURPOSE OF ISSUE.—Among the many varieties of bonds which take their names from the purpose of the issue, the following may be noted:

Adjustment bonds
Bridge bonds
Construction bonds
Consolidated bonds
Car trust bonds
Dock and wharf bonds
Equipment bonds
Founders' bonds
Ferry bonds
General bonds
Improvement bonds
Interim bonds
Interest bonds
Purchase-money bonds
Refunding bonds
Reorganization bonds
Revenue bonds
Subsidy bonds
Terminal bonds
Temporary bonds
Unified bonds
Etc.

BONDS AS TO FEATURE OF SECURITY GIVEN FOR PAYMENT.—From the point of view of the security given for payment, bonds fall into two general classes: viz., (1) **unsecured,** and (2) **secured.** Secured bonds may be divided into two general classes: (a) those having **personal security,** and (b) those secured by **liens on specific property.** These in turn may be subdivided as the following outline indicates:

I. Unsecured

1. Government bonds
2. Corporation debentures

II. Secured

1. Personal security
   - (a) Indorsed bonds
   - (b) Guaranteed bonds
     - (1) Guaranteed as to principal
     - (2) Guaranteed as to interest
     - (3) Guaranteed as to both principal and interest
2. Lien security
   - (a) By character of property pledged
     - (1) Real property:
       - Land grant bonds
       - Real estate bonds

(2) Personal property:
Collateral trust bonds
Sinking fund bonds

(b) By character or priority of lien
(1) First, second, or third mortgage bonds
(2) General mortgage bonds
(3) Blanket mortgage bonds
(4) Consolidated mortgage bonds
(5) Income bonds
(6) Profit-sharing bonds or participating bonds
(7) Dividend bonds

BONDS AS TO TERMS OF PAYMENT.—From the point of view of terms of payment, bonds may be classified:

1. According to **method of payment**
   (a) Callable bonds
   (b) Sinking fund bonds
   (c) Serial bonds
   (d) Convertible bonds
2. According to **currency in which payable**
   (a) Gold bonds
   (b) Currency bonds

BONDS AS TO EVIDENCE OF OWNERSHIP AND TRANSFER.—Considered from this viewpoint, there are three classes, viz., coupon bonds, registered bonds, and coupon registered bonds.

Coupon bonds are issues, the contracts for payment of interest on which are evidenced by separate coupons or contracts for payment which fall due consecutively on the interest payment dates. The coupons may be detached, and constitute complete promissory notes in themselves, payable to bearer. The coupons are usually printed on small sections of a sheet of paper attached to the principal obligation, and as they mature are clipped off and presented for payment. They are frequently presented for payment through a bank as a check or draft would be.

Registered bonds are credit instruments in which the interest obligation is included in the body of the document as in a promissory note, the ownership of the bond being registered as a means of protecting the payee against loss, and necessitating a formal transfer and registration to transfer the title when the old instrument is canceled and a new one issued. Interest is payable by money delivery or by check sent by mail to the address of the registered holder.

Registered coupon bonds are those for which the principal is registered, but interest coupons are made payable to bearer.

MORTGAGE BONDS.—Bonds that are backed by a mortgage on real property are, in this country, the most popular type of bonds and will probably always remain so. Not only is a note or bond secured by real estate the most popular type of secured obligation, but, for most individually owned businesses, partnerships, and small corporations, it is the only practical form of long-term obligation. Other forms of security are utilized in the main only by large concerns which are widely and favorably known and therefore enjoy an exceptional measure of credit apart from their property holdings.

JUNIOR ISSUES.—The great mass of obligations on real property are secured by first mortgages. There is a considerable amount, also, of second mortgage securities, and relatively few third, fourth, or later mortgage securities. Anything beyond a second mortgage is seldom found except among the

obligations of large railroad corporations, and seldom there under any title really descriptive.

A second mortgage issue, when it is recognized as such, will usually have to pay a rate of interest perhaps ½ to 1% higher than a first mortgage issue. The issues which are protected by subsequent mortgages may be expected ordinarily to pay still higher interest rates in rough proportion to the number and amounts of the claims before them. However, this is not an invariable rule, for the property pledged may be ample to protect all the issues. In practice junior mortgage issues in many cases are of larger size, carry no higher rate of interest, and enjoy a wider market than do the issues which precede them.

DEED OF TRUST.—It is impossible to issue separate notes and mortgages to each bondholder, because aside from the inconvenience and excessive cost which would result from this method, the mortgages would not be of equal rank since the first one issued would have priority over all the others, and so on for each successive one issued. It is necessary, therefore, to employ some means by which all the creditors will have a lien of equal rank on the property pledged as security. This is accomplished by making a **deed of trust in favor of a trustee** who holds the property for the benefit of all the creditors. In case of default, the trustee acts on behalf of all the bondholders and, if necessary, forecloses on the property pledged under the mortgage and acts for the benefit of the creditors.

Most of the corporate deeds of trust which are now used contain the equivalent of the following information, given in "Controlling the Finances of a Business," by McKinsey and Meech:

1. Date, and names of the parties to the deed of trust.
2. A section defining terms and phrases used throughout the indenture.
3. The preamble, which usually contains a full statement concerning the legal status of the corporation, including the state in which it is incorporated, the amount of its bonds and capital stock, a description of its assets, and reciting the authority given by the stockholders and directors for the bond issue, and the purpose of the issue.
4. **Full text of the bond, the interest coupon** if it is a coupon bond, and the trustee's certificate of validity which appears on each bond.
5. The **granting clause** which **transfers the property to the trustee** and gives a detailed description of it. In the case of a mortgage bond issue this clause is in the form of a mortgage on real estate in favor of the trustee. In a collateral trust bond it is in the form of a pledge of collateral security to the trustee.
6. The covenant of the corporation to pay the principal and interest upon the bond.
7. Provisions with reference to the **possession and maintenance of the property pledged.** In the case of a mortgage bond, the mortgagor retains possession and control of the mortgaged property unless it is taken possession of by the trustee or other representative of creditors in case of default. In the case of the collateral trust bond, the trustee retains possession of the pledged securities, but remits the interest or dividends thereon to the obligor. In either case the mortgagor assumes the responsibility of preserving the value of the pledged property, and the deed of trust frequently contains provisions with reference to his duty in the matter.
8. A detailed statement of **covenants** by the corporation to do or not to

do certain things, the doing or not doing of which protects the bondholder. For example, the corporation may agree that net tangible assets shall always be maintained at 200% of bonds outstanding, and that net current assets shall always be 125% of bonds outstanding.

9. In some cases, where the mortgagor is a holding company, there may be a statement with reference to the **nature and standing of the property of subsidiaries.**
10. **Procedure in case of default of interest and principal** on the bonds and a statement of what constitutes default.
11. **Procedure of the trustee in case of receivership.**
12. The **duties, responsibilities, and liabilities of the trustee.** There is frequently a statement with reference to his compensation and the conditions under which he can be removed.
13. The signatures and seal of the corporation, and of the trustee.

SINKING FUND BONDS.—Mines, oil wells and other enterprises which have a limited lease of life are generally required for the protection of bondholders to establish a sinking fund for the redemption of bonds. In modern practice, it is generally becoming the custom to provide sinking funds of one sort or another in almost all types of industrial bonds, thus compelling the utilization of a certain amount of the earnings each year to reduce the debt.

COLLATERAL TRUST BONDS.—Collateral trust bonds are those secured by deposits of other securities with the trustee who holds the deed of trust. Long-term bonds should be secured by stocks and bonds that it is intended to hold permanently. Ordinarily these securities, posted as collateral, are those of subsidiary corporations or of other corporations in which the borrowing company expects to maintain a permanent interest.

DEBENTURE BONDS.—Debenture bonds are those issued on the general credit of the company, without any specific pledged security. To successfully float an issue of this type, the issuing company must enjoy high credit standing. Debenture bonds are sometimes used as a means of obtaining funds by corporations having a small amount of money invested in tangible assets but a large amount of good-will. Various provisions are inserted in debenture bonds to give them a better credit standing than would otherwise be the case. Sometimes the owners are given a preferred charge upon property and income over owners of subsequent issues of debentures or other obligations.

The usual debenture bond is merely the formal corporate promise to pay money. It is a legal obligation of the corporation and may be sued upon if unpaid at maturity, but it cannot be made the basis of a foreclosure, since it is not a lien on any specific property. Its claim is superior to that of preferred stock, but it has no preference over other unsecured claims of the corporation, such as bank loans, unless the deed of trust so stipulates.

Sometimes the arrangement under which the debentures are issued specifically provides that no more shall be authorized while these are outstanding, but most common is the provision that no mortgage may be created on the property without including the issue of debentures. In this manner the holders of the debentures are assured that no later issue of securities will cut in under their position and destroy the strength of their security.

Debenture bonds are generally issued at a comparatively high rate of interest, in order to increase the working capital of concerns which are precluded by reason of their method of earlier financing from raising additional funds in other ways. Frequently the protective provisions surrounding earlier preferred stock issues provided against the creation of mortgage obligations and have

cut off those avenues of financing and left open financing through debenture issues alone. Under such circumstances, therefore, it is usual that provisions are made for the early retirement of such issues and rather drastic protective covenants are generally imposed.

Protective Provisions in Debenture Bonds.—Some of the commoner provisions which have to do with protective measures are the following:

While debentures are outstanding the company shall not further mortgage or pledge any of its assets except for the acquisition of additional property in which case the purchase money obligations are usually limited to a conservative percentage of the value of the newly acquired property. In the issue of the $15,000,000, 8% convertible 20-year debentures of the United Drug Co., a provision was made that no mortgage should be placed upon any of the assets of the company or its subsidiaries, except purchase money mortgages, unless the issue of debentures should be equally and ratably secured thereby.

Another protective measure often used is that the net tangible assets of the company shall be maintained at an amount equal to at least 200% of the outstanding debentures and the ratio of current assets to current liabilities shall not be allowed to fall below a certain stipulated minimum. Sometimes it is required that the working capital, or net quick assets, shall always be kept equal to or greater than the amount of debentures outstanding.

INCOME BONDS.—Income bonds possess some of the features of both bonds and stock. As the name implies, the payment of interest can be demanded only when there is sufficient income for that purpose; if the interest charges are not earned they need not be paid. The principal, however, is usually secured by a mortgage.

Income bonds possess few of the attractive features of either stock or bonds. From the viewpoint of the investor preferred stock is preferable to income bonds because preferred stock dividends are usually cumulative while income bond interest is usually not cumulative. Income bonds are seldom accepted by investors from choice. Most income bonds are the products of reorganization. In readjusting the financial structure of a company bondholders are often required to accept income bonds in place of bonds carrying a fixed charge.

PARTICIPATING BONDS.—Participating bonds participate or share with the stockholders' earnings above the regular specified interest on the bonds. The conditions governing participation are set forth with great care. Such bonds are seldom used in American corporate finance.

CONVERTIBLE BONDS.—Convertible bonds are those which possess the privilege of conversion into some form of security on some predetermined basis. Usually the security into which bonds may be converted is common or preferred stock. The conversion privileges are generally stipulated in the security and consist of the following:

1. That after or at any time up to and including a certain date, the securityholder may exercise his right to convert. If his security is callable, he may be given the privilege of converting within a given number of days after it has been called for redemption.
2. The kind of security into which the investors' bonds or stock may be converted.
3. The ratio of conversion, e.g., the number of shares of stock to be exchanged per $100 par of bonds with adjustments for accrued interest and dividends.

The conversion privilege adds a speculative element to the bonds.

If the privilege becomes valuable, the bonds will sell on a basis higher than is justified by their purely investment merits. The value of the conversion depends upon the likelihood that its exercise will become profitable. Issuance of convertible bonds is usually a concession made by the issuing company because of unfavorable money market conditions.

CALLABLE BONDS.—Bonds are usually redeemable at the option of the company, as a whole or in part, upon due notice to the bondholders at **premiums** varying with the terms of the issue. The callable feature allows the corporation, at its option, to refund high rate bonds with lower rate bonds or to clear itself entirely of debt, prior to its maturity, if the occasion for this arises. The investor, however, has the disadvantage of not knowing when his bond will be called, and he is faced with the possibility of losing a high return on his capital before the bond matures, and of being compelled to go to the trouble of reinvesting. These disadvantages are offset by making the bond callable at a premium, usually ranging from 5 to 15% of the principal amount of the bond. The premium usually decreases as the bond nears maturity.

GUARANTEED BONDS.—Guaranteed bonds are those whose payment is guaranteed by some other corporation. The guarantee may be as to principal or interest or both. It must be in writing and must be written on the instrument itself or be attached to it to be effective.

EQUIPMENT TRUST BONDS.—Equipment trust bonds differ from first mortgage bonds in that title to the equipment remains with the manufacturer, or with the trustee, the equipment being leased to the user, usually a railroad company. The lessee secures title ultimately by completing a series of payments. This is an excellent security and defaults on such bonds are extremely rare.

Short-Term Notes

SHORT-TERM CORPORATE NOTES.—Short-term corporate notes is the name applied to a corporation's promissory notes which are issued under more or less elaborate conditions set forth in an agreement between the issuing company and a trustee. They may be secured or unsecured and in coupon or registered form. They possess many of the characteristics of bonds except that they run for a shorter term, usually one to five years.

This section deals with short-term notes of this type as distinguished from the ordinary type of commercial notes usually running from 30 to 90 days or more, and sold through note brokers or discounted by commercial banks.

Short-term notes which are secured by collateral or some other specific property are known as **secured notes, collateral trust notes,** or some similar name. They are virtually short-term collateral trust bonds. Occasionally short-term notes are secured by a mortgage.

SOME CHARACTERISTIC FEATURES OF SHORT-TERM NOTES.—Short-term notes may vary in terms from time to time and from company to company. The following are some of the features usually found in them:

1. Like bonds they may be issued in **registered** or in **coupon form.** The latter have interest coupons attached and in some cases are registerable as to principal only.

2. **Redemption privilege** at the option of the company may be attached to the notes. This reservation is customarily put in notes to permit the company to anticipate their maturity, if desirable.

3. The notes may be made attractive to the investors by giving them the

privilege of converting them into the common or preferred stock or bonds of the company.

4. The element of **security** to the purchasers of such notes is usually set forth in some such provision as "no secured obligations shall be issued by the company in the future unless these notes shall be given equal security."

5. Some issues provide that certain periodic payments be made into a **sinking fund** to be used to redeem the notes at a certain price.

REASONS FOR ISSUANCE OF SHORT-TERM NOTES.—Corporations may find it desirable to issue short-term notes for the following reasons:

1. **Condition of money market.** At the time the corporation requires additional funds the condition of the money market may be such that funds can best be secured through this medium of financing.

2. **Temporary needs of the corporation.** The needs of the company may be of a comparatively temporary character yet for a longer period than could be satisfied by bankers' loans or notes sold through note brokers.

3. **High earning power and expansion.** The corporation may have large earning power and does not wish to permanently increase fixed liabilities, preferring to reinvest surplus earnings and retire the short-term notes as they mature.

DISADVANTAGES OF SHORT-TERM NOTES.—There are certain disadvantages in the continued use of short-term notes which should be brought to the attention of the financial manager.

1. **Cost of financing** may be considerable, particularly where a corporation is compelled to refund a maturing issue.

2. **Maturities** may come at an inopportune time when the concern may find it difficult to raise funds to pay them. A number of concerns during 1917 and 1918 when interest rates were very high issued short-term notes to avoid paying high interest rates on long-term bonds. When the notes matured in 1921 and 1922 some of these concerns found difficulty in paying them because of decreased earnings and sales together with inventory losses during the depression of 1920 to 1922.

3. The business may **incur a debt** it cannot pay if the proceeds are invested in fixed assets rather than in working assets. As fixed assets do not return their equivalent profits except over a long period of time it is not well, as a general rule, to issue short-term notes for this purpose.

Redemption of Bond Issues

REDEMPTION OF RAILROAD AND INDUSTRIAL BONDS.—Most industrial bond issues and some railroad issues are paid off when due, out of past earnings. The majority of railroad issues are, however, usually taken up by some **refunding operation;** usually another issue is sold and the proceeds used to redeem the matured issue. In industrial corporations these refunding operations are not always feasible. Investors are not, as a rule, willing to take chances on a refunding of the loan when it matures, and want some more specific provision for payment. Usually this provision takes the form of an agreement that certain reservations will from time to time be made out of the corporate profits. Such a reservation of profits is known as a "sinking fund."

SINKING FUNDS.—The sinking fund for bonds is a part of the stockholders' net earnings, temporarily set aside and used annually or semi-annually to retire a certain proportion of the bonds. Sinking funds may be a fixed annual amount, or a percentage of output or net profits. Such payments normally

increase the security back of the obligation and usually make possible the retirement of the bonds at maturity. It is a general practice for companies with **property of a wasting nature,** such as timberlands, mines, oil wells, and the like, to make a liberal sinking fund provision based on the annual production, so as to retire the entire issue by maturity. In the case of other concerns it frequently happens that the sinking fund will provide for the retirement of only a portion, perhaps 50%, of the bond issue before maturity.

The annual reservation for sinking fund purposes, used to buy in the bonds if they can be had at or below the redemption price, or to redeem bonds, if not so purchasable, will not, ordinarily, be a serious burden if the provisions of the sinking fund are not too excessive.

SINKING FUND METHODS.—The **fundamental purpose of the sinking fund** is to reduce the ratio between the amount of the debt and the value of property by which it is secured. The margin above the bonds, the equity, is increased. Different provisions apply to the operation of different sinking funds but this end is the primary one in all cases. The variations concern either the rates of payment into the sinking fund reserve or the manner in which the reserve shall be invested. These variations, some of which are of considerable significance, are almost innumerable.

The following table illustrates some of the more familiar methods of fixing the amount of sinking fund reserve to be set aside annually:

1. Fixed regular instalments—applying more commonly to closed issues of bonds:
   (a) Fixed amounts of money.
   (b) Fixed par value of bonds.
2. Varying but clearly defined proportional instalments not determined by the results of the business—applying more commonly to open issues of bonds:
   (a) Instalment a proportion of the outstanding bonds. This is the commonest provision.
   (b) Instalment a proportion of total capitalization or entire debt.
3. Varying instalments determined by the results of the business:
   (a) Instalments proportional to the gross earnings.
   (b) Instalments proportional to the net earnings.
   (c) Instalments proportional to the admitted surplus.
   (d) Instalments proportional to the dividend payments.
   (e) Instalments proportional production.
4. Contingent payments:
   (a) Optional payment determined by a maximum and a minimum.
   (b) Entirely optional.

The first group of sinking fund provisions, included under the first division of the classification given above, represents those bond issues in which the corporation is required to set aside a definite fixed amount each year. Sometimes the corporation is required to invest annually a definite sum of money in bonds, but rather more frequently, especially in railway issues, it is required to purchase a **definite face value of the bonds,** irrespective of market price.

Securing Funds

WHERE CAPITAL FUNDS MAY BE OBTAINED.—Capital funds may be obtained from:

1. Corporation's own surplus earnings
2. Stockholders
3. Investment public
4. Speculative public
5. Employees
6. Customers
7. Creditors

ADDITIONAL CAPITAL FROM SURPLUS.—Reinvesting profits in the business results in furnishing, for practical purposes, additional capital. Practically every concern adds a part of its profits from time to time to its accumulated surplus which when reinvested in the business virtually amounts to a **capitalization of surplus.** This is made so, legally, by distributing the book surplus as a stock dividend.

In small, close corporations, owned by people active in the business, the tendency is generally to reinvest a large part of the profits in the business. Continuing this process for a number of years results very often in building up a large business from a very moderate initial capital. The outstanding examples of this method of adding to capital are the Carnegie Steel Co. and the Ford Motor Co.

ADDITIONAL CAPITAL FROM STOCKHOLDERS.—Where the additional capital requirements of a corporation can be met by the stockholders it will leave open the possibility of obtaining future capital needs from the public. It is a **universal rule of law** that where new voting stock is issued by a corporation every shareholder must be given an opportunity to buy new shares in proportion to his holdings of old shares, unless a provision to the contrary has been inserted in the charter or by-laws. In close corporations new issues of common shares are usually allotted on this basis.

In obtaining additional capital by this method the corporation issues to the stockholders negotiable instruments known as stock rights. These give the holder the right to purchase a certain number of new shares from the company at a fixed price. In many offerings of stock to stockholders a banking firm underwrites the offering at a fixed price, thus insuring the sale of the entire issue.

CAPITAL FUNDS FROM THE INVESTING PUBLIC.—Another source of capital funds is the investing public. The most important classes of investors in corporate securities are:

1. Professional and salaried people, as well as retired business men who have no business of their own in which to place their funds.
2. Women and minors who have inherited money.
3. Estates held in trust.
4. Banks and savings institutions.
5. Insurance companies.

Active business men are not as a general rule investors to any great extent in securities of other corporations than those in which they are directly interested, for the reason that they can use all their money in their own concerns.

CAPITAL FUNDS FROM THE SPECULATIVE PUBLIC.—The speculative public may be classified into three groups:

1. **Speculators** who buy securities in the hope of making a quick and large profit.

2. **People with limited knowledge of financial affairs** but who do not know the difference between an investment and a speculation. Such people are continually placing their money in the hands of unscrupulous promoters in the blind faith that they are making an investment.

3. **Intelligent business and professional men** who buy and hold speculative

securities for a rise, in the full knowledge that they are taking chances. This group makes the best type of stockholders for a comparatively small industrial or commercial corporation, particularly of a promotional character. They recognize the business hazard incident to the establishment of a business and also that the stock sometimes must be held for a long period before dividends can be realized.

The speculative public is reached in different ways, the most common of which are:

Group (1) is usually reached through the stock market.
Group (2) is reached by means of advertising and circular letters.
Group (3) is generally reached by personal solicitation by the officers of the corporation and through the stock market.

CAPITAL FUNDS FROM EMPLOYEES.—In recent years a number of concerns have sought to sell some of their capital stock to their employees. The primary purpose in most instances has been more to **improve their relations with their employees** than a desire to raise capital.

Some of the **advantages** which are claimed for selling stock to employees are:

1. Enables the corporation to secure funds easily and cheaply.
2. Serves to retain employees because of their stock ownership in the corporation, thereby reducing the cost of a high labor turnover.
3. Employees have an incentive for better service because they share in the profits and success of the company.

Some of the **disadvantages** of employee ownership of capital stock may be summarized as follows:

1. No real economy. Generally to induce employees to purchase stock special concessions are necessary. Sometimes the stock must be sold at less than the market value and payment arranged on the instalment plan.
2. Does not materially decrease labor turnover because the average employee cannot earn or save enough to acquire sufficient stock to make him feel that his share in the profits of the concern are worth while.
3. May weaken the financial policy of the company in that the directors may hesitate to pass a dividend, when sound finance demands it, because they fear to incur the displeasure of their employees.
4. Employees may resent the suggestion of stock ownership and look upon it as a plan to weaken their labor organization or to prevent them from obtaining increased wages.
5. May promote a speculative spirit among employees, particularly where the stock is actively traded in on a stock exchange. When employees speculate in the securities of their company and lose they are apt to become disgruntled and blame the company, thereby nullifying the advantages that the company may have hoped for by having its employees as stockholders.

CAPITAL FUNDS FROM CUSTOMERS.—Although capital may be obtained by selling securities to customers this method is not often used except in public utilities and cooperative organizations. The concern which wishes to raise capital by selling stock to its customers should possess the following:

1. Have a product for which there is a continuous demand, such as a prime necessity of life.
2. Have a good reputation for quality of product and for service.

3. Have an earning capacity and financial condition which will permit uninterrupted payment of satisfactory dividends.

The principal **advantage of customer ownership** of stock is the possibility of obtaining the permanent trade and interest of the customer. For this reason quite a few public utility companies have adopted the plan and have met with success. In many instances the plan created a wide market for the stock and a large number of satisfied customers, and made stockholders of a large number of voters who were instrumental in bringing about a healthy business relation between the public utility companies and the political subdivisions of the states in which they operate.

Provision for Contingencies

DEFINITION AND NATURE OF RESERVE.—A reserve may be defined as follows: It is an account with a credit balance set up because the expenses of operation have decreased an asset or created a liability, or because it is desired to set aside part of the profits from the surplus available for dividends or clearly to mark an unrealized profit.

Nearly all well-managed corporations charge against the profits of each year an estimated sum, or a number of distinct estimated sums, which are intended to provide for losses and expenses likely to arise in the future but which are incident to the operations of the current period. The sums so charged are credited to reserve accounts, which are carried on the balance sheet of the company.

Reserve accounts do not consist of funds of cash or property set aside for the purpose of meeting future expenses. A company may accumulate large reserve accounts and yet be quite unable to meet the anticipated expenses when they actually arise. This is due to the fact that the reserved profits are tied up in stock or equipment or in other ways and the company is short on cash and free credit.

CLASSIFICATION OF RESERVES.—The reserves ordinarily met with in business may be classified as follows:

A. Valuation Reserves:

I. Asset valuation reserves, which simply represent a diminution in the value of the assets they pertain to and are a part of the operating expenses:

(a) Depreciation reserves for plant, machinery, equipment, merchandise, etc.

(b) Depletion reserves for exhaustion of natural resources such as mines, timberlands, oil wells, etc.

(c) Bad debt reserves for uncollectible accounts receivable, notes receivable, sales discount, etc.

(d) Market fluctuation reserves for merchandise inventories, securities, etc.

II. Liability valuation reserves, which represent accrued liabilities, usually whose amounts at the time can only be approximated:

(a) Operating reserves for taxes, accrued wages, rent, insurance, etc.

B. Proprietorship Reserves (a part of the total surplus):

Recorded and designated reserves:

(a) Appreciation reserves for land, buildings, machinery and other physical

assets, which segregate from earned surplus profits resulting from marking up the value of such assets in appraisals.

(b) Open reserves for—
1. Working capital
2. Plant extension
3. Extinguishment of debt
4. Improvement and betterments
5. Sinking fund reserve

These are temporary appropriations of surplus, and their main purpose is to protect the working capital position against excessive dividend disbursements. When the various payments or expenditures for which the reserves have been set up have been completed, the reserves are merged back into surplus.

(c) Contingency reserves for fire, flood, or other loss; for accidents, guarantees or pending lawsuits; for obsolescence, etc.

Through such reserves these extraordinary losses are charged against surplus instead of current operating income.

Disposition of Profits

DIVIDEND AND SURPLUS RELATED.—In formulating a policy as to the disposition of earnings the directors must decide what principle they should follow as to dividends on the one hand and as to the accumulation and use of surplus on the other.

The board of directors of a corporation have **sole authority** in deciding what disposition should be made of the earnings. The officers and stockholders have no voice in such decisions. In practice, however, the directors generally look to the financial manager for advice and recommendations to aid them in their decisions.

DIVIDEND POLICY.—In considering the dividend policy to be followed by a company it is necessary to draw on past experience, exercise a good deal of common sense and make such adjustments as expediency demands. There are several factors to consider among which are:

1. Amount of earnings.
2. Distribution of stock holdings.
3. Nature of the business.
4. Needs for additional capital.
5. Age of the business.
6. Current financial condition of the business.
7. Stage of the business cycle.

NATURE OF BUSINESS.—The nature of the business very often decides the dividend policy. A speculative business with fluctuating earnings will have a different policy than a stable business with steady earnings. The character of the business in so far as it relates to the product it handles is also a factor.

A concern which deals in consumer necessities is less subject to fluctuations in earnings than a concern dealing in luxuries or in capital or production goods. The average consumer uses about as much of the prime necessities of life during periods of depression as in periods of prosperity. On the other hand, capital goods such as machinery, freight cars, etc., are purchased largely in periods of prosperity to meet the demands for increased production. The demand for such machinery falls off during periods of depression.

Concerns dealing in capital or production goods will need to adopt a conservative dividend policy and build up a substantial surplus to withstand decreases in sales and possible inventory losses during periods of depression.

Concerns dealing in prime necessities (such as the baking industry), with a steady demand for their products and comparatively small inventories, can afford to adopt a more liberal dividend policy and distribute a large share of their earnings as dividends, adding a correspondingly smaller amount to the accumulated surplus.

The **price of the product** is an element affecting net earnings. Low-priced consumer goods are generally sold in larger quantities in periods of depression than in periods of prosperity, whereas the sale of high-priced consumer goods decreases. The net earnings of concerns dealing in low-priced necessities are generally more stable than the earnings of concerns dealing in higher-priced commodities of the same class.

The **utility of the product** will affect the sales and profits. Luxury articles, such as jewelry, will be sold in greater volume in periods of prosperity than necessities. On the other hand, in periods of depression such articles will be purchased in smaller volume than necessities. In other words, the greater the utility of a product, foodstuff for instance, the steadier the demand, and other factors being equal, the more stable the sales and profits.

PERCENTAGES OF EARNINGS DEVOTED TO DIVIDENDS.—A tabulation of the income statements of about 900 English companies for the year ended July 31, 1914, before the economic conditions of the country had been disturbed by the Great War, shows the following distribution of profits:

	Net Profits £	Preferred Dividend £	%	Ordinary Dividend £	%	Surplus, Reserves, etc. £	%
Breweries	2,409,759	486,255	20.2	1,312,820	54.4	610,684	25.4
Gas	856,541	139,729	16.3	887,953	103.7	*171,141	*19.8
Iron, coal and steel	1,533,761	275,244	17.9	669,196	43.5	589,321	38.5
Shipping	770,861	104,895	13.6	326,952	42.2	339,014	44.2
Teas, rubber, etc.	535,699	31,247	5.7	400,384	75.0	104,068	19.3
Trusts	160,725	25,663	16.0	109,220	67.9	25,842	16.1
Waterworks	62,727	9,357	14.9	45,315	72.3	8,055	12.8
Miscellaneous	3,160,147	945,715	29.9	1,473,991	46.5	740,441	23.6
	9,490,220	2,018,105	21.3	5,225,831	55.2	2,246,284	23.5

* Deficit.

The above table shows that preferred dividends received 21.3% of the net profits; ordinary dividends received 55.2%; and the balance added to surplus was 23.5%. The gas companies paid out in ordinary and preferred dividends considerably more than their net profits, showing that they drew in this year upon the surplus accumulated in previous years.

The London *Economist* comments on the above table as follows: "As usual the iron and steel and shipping companies have adopted a conservative policy with regard to the distribution of profits to their shareholders. Most of the rubber companies have no preference shares, and prefer to maintain their high dividends at the expense of the reserve funds. A very high percentage of the profits of the water and gas companies goes to the ordinary shareholders, and in the case of the latter large reductions have been made in the amounts carried forward for this purpose."

Similar compilations for companies in the United States are not available. "Statistics of Income" issued by the Treasury Department, shows that in 1919 the net income of 192,037 companies reporting definite invested capital was,

after payment of taxes, $7,143,509,710, and that the dividends paid to individual stockholders was $2,453,774,825. This gives a little over 34% of the net corporate income paid out in dividends, and between 65 and 66% retained for surplus and reserves. As will be noted, the tendency in European countries is much more strongly in favor of paying out the greater portion of earnings in the form of dividends than it is in the United States. This is due in large part to the high surtaxes on individual incomes. It is due also to different and in some respects more conservative standards of capitalization.

ESTABLISHING A FIXED DIVIDEND POLICY.—A corporation desiring to establish a policy of a fixed dividend rate should make a study of its **financial history** and ascertain:

1. The amount of fluctuations in past earnings.
2. How long the periods of operating deficits have been and under what circumstances.
3. The average earnings for 5 or 10 years immediately preceding.
4. Present surplus position.

A corporation with a large surplus invested in liquid assets can afford a more liberal policy in paying dividends even with fluctuating earnings than a concern with a small surplus. The United States Steel Corporation, for instance, with a large surplus and with substantial liquid assets could continue to pay dividends on its common stock even in the face of operating deficits for a number of years. The same policy might ruin a concern without such a surplus.

REGULARITY OF DIVIDENDS.—Regularity of dividends, both in payment and rate, is of greatest practical importance to a corporation with a large number of stockholders. The confidence of a majority of such shareholders generally rests on the regularity of the dividend. They are not active in the business of the corporation, have only the barest information as to the manner in which the business is handled, and are not sufficiently familiar with the business or interested in it to absorb detailed information set forth in the reports submitted to them.

To shareholders of this type, regularity in their dividend returns is of the highest importance. They count upon these returns as a fixed portion of their income—in thousands of instances the living expenses of dependents are provided out of these dividends. The American Telephone & Telegraph Co. has more women shareholders than men. The same thing is true of other corporations, and all of the large corporations number many women among their shareholders. The effort of the directors of a corporation which includes a large proportion of shareholders of this type should clearly be to meet their needs by paying a permanent rate of dividends with the fewest possible fluctuations. This dividend rate in a really stable and conservatively managed corporation seldom varies to any considerable degree except when it is increased. And it is not increased until after the directors have assured themselves that in all human probability a later decrease will not become necessary. If there are unusual, or possibly temporary profits which it is thought wise to distribute, the directors of such corporations will ordinarily announce an **"extra" dividend** or once in a while will cut a **"melon"** in the form of a stock dividend or a subscription privilege. These extras, however, are to be regarded only as incidents which should not be allowed to disturb the regular and uninterrupted flow of dividends.

REGULAR DIVIDENDS VS. IRREGULAR PROFITS.—In sharp contrast to the desired regularity of dividend payments is the wide fluctuation in profits

that is characteristic of the majority of corporations. Business does not move on a regular and even keel. Economic and financial conditions vary; changes in management occur; difficulties with employees arise; changes in taste may suddenly create new markets or wipe out markets—all these and many other factors which are constantly at work bring about kaleidoscopic changes which often come as great surprises even to people who are intimately acquainted with the business. The sudden outbreak of the World War in 1914, followed by an intense depression in iron and steel and machinery industries, was an unexpected variation of this kind. Within a few months it was followed by an unprecedented demand from the European nations at war for the products of American farms and factories, stimulating production and prices to an unheard-of extent; this was a variation no less surprising. Then came the deflation following the close of the war. This was the expected happening but none the less, many of the great corporations were caught unawares. Thus the Central Leather Co. showed a net income for 1919 of $16,126,689, and in 1920 a net deficit of $20,590,006.

Also rapid fluctuations are constantly taking place even under normal conditions. Certain lines of business, such as building construction, ship construction, iron and steel manufacturing, and manufacturing of novelties and articles of fashion or luxury, are peculiarly subject to great fluctuations. In Andrew Carnegie's famous phrase these industries are either "prince or pauper." For instance, during the fiscal year 1913 the Lackawanna Steel Co. earned over $3,000,000 available for dividends on its common stock, equal to 8.3%; in the fiscal year 1914, prior to the outbreak of the World War, the same company showed a deficit, after payment of fixed charges, amounting to $1,500,000. Again in 1918, profits available for dividends were over $8,000,000, while the company's profits for 1919 were but $356,863, and it "dipped" into surplus to pay dividends to the extent of $1,749,152. In 1920 this deficit was easily covered by the net profits, and this after payment of dividends.

On the other hand, industries which sell small articles for personal use, such as cigars or household sundries, are likely to avoid fluctuation. The business of the large five-and-ten-cent stores is especially stable; owing to the fact that they are operated on a strictly cash basis, there is usually little difficulty in adjusting expenditures to sales. During August and September of 1914, when almost all other lines of business were suffering, the business of F. W. Woolworth Co. and S. S. Kresge Co. both showed very satisfactory increases.

ADVANTAGE OF CONSERVATIVE DIVIDEND POLICY.—A conservative dividend policy is of advantage to the corporation. It may seem that such a policy is unfair to the stockholders, in that they cannot expect to receive, in dividends, a large proportion of the actual earnings of the company. This is, however, not so for the following reasons:

1. The earnings above dividend requirements are **reinvested** in the business thereby increasing the productive capacity of the concern. This increase may, in the course of a few years, raise the productivity of the company to such an extent that the average net earnings will permit larger distribution of dividends than would otherwise be possible.

2. In a business with great fluctuations it is at times necessary to **conserve all the available assets** to permit it to go through periods of depression and in periods of prosperity to have funds necessary to meet expansion. Earnings retained in the business are of great value to meet this recurring expansion and contraction.

An outstanding example of the benefits of a conservative dividend policy

was that followed by Andrew Carnegie and his associates in building up their iron and steel business from a comparatively small inception. Their policy of putting a large part of their earnings back into the business, year after year, resulted in creating a business of such magnitude and earning power that it became the largest unit taken over by the United States Steel Corporation when that corporation was formed and which paid the stockholders of the Carnegie Company for the properties, securities of market value of well over $500,000,000.

RULE FOR MAINTAINING REGULARITY OF DIVIDEND RATE.—Dividends should not be allowed to rise, even in the most prosperous periods, above a **conservative estimate of the minimum earnings** of the company. Those concerns which suffer from great fluctuations find this to be a harsh rule. It means that, so long as there remains even a reasonable possibility that earnings may sink close to or below the level of fixed and contingent charges, no dividends whatever should be paid. This has been the rule followed by all really successful corporations the nature of the business of which involves unavoidable fluctuations. The Carnegie Steel Co. ran as a highly successful corporation for many years without paying dividends. Even after a corporation of this nature begins to pay dividends, it is not to be expected, if the management is conservative, that they will rise anywhere near the level of the average earnings. The rule of keeping dividend payments below the level of minimum earnings must strictly be adhered to.

IRREGULAR DIVIDENDS UNOBJECTIONABLE FOR CLOSED CORPORATIONS.—As stated heretofore, **a regular dividend policy** is best for a large corporation with many stockholders. An irregular dividend policy whereby the greater part of the yearly earnings are distributed to stockholders is unobjectionable in a small or closed corporation, all the stock of which is held by men who are themselves active in the business and familiar with its affairs. Where capital requirements are fully met and there is no further necessity of building up a surplus for the needs of the business, the distribution of annual earnings as dividends has the advantage of stimulating those who are active in the business.

PREFERRED DIVIDEND.—Dividends payable on preferred stock are known as preferred dividends. These may be **cumulative or non-cumulative.** Such stock is entitled to dividends, up to a generally fixed rate, when earned and declared in preference to common stock.

Cumulative preferred dividends are dividends which, if not paid when due, accumulate and must be paid before dividends can be paid on common stock. With such stock the directors may defer payment until the earnings are sufficient to pay them. As the accumulations stand in the way of dividends on common stock and as the credit of the corporation is adversely affected by large arrears of preferred dividends, directors of corporations usually endeavor to pay such dividends where the earnings are sufficient and the company is in a financial position to do so.

EXTRA OR SPECIAL DIVIDENDS.—A corporation following a conservative policy of regular and fixed dividends may in time accumulate more surplus than the business requires. The directors under such circumstances may wish to make an additional distribution to the stockholders in the form of an extra or special dividend. Care should be taken to designate such a dividend as a special dividend so that the stockholders will not be led into the belief that a larger regular dividend will continue in the future.

PROPERTY DIVIDENDS.—The term "property dividends" is applied when the dividend payment consists of a transfer to the stockholder of property of one kind or another, generally securities of other corporations or of the government, which the corporation owns. The distribution to stockholders of dividends payable in United States Liberty bonds acquired during the World War is a case in point.

SCRIP DIVIDENDS.—Scrip dividends are written promises of a corporation to pay the dividends declared by the directors. These promises are usually negotiable and generally have a definite maturity date and often bear interest. Sometimes, however, they carry no interest and have no maturity date, being redeemable at the option of the corporation.

The **primary purpose** of using scrip dividends is to anticipate cash receipts and to segregate current earnings to present stockholders who may dispose of their scrip without parting with their stock. A corporation may have made sufficient profit to warrant a dividend but may be in a poor cash position because the earnings are tied up in accounts receivable, inventories or even capital assets. When the accounts receivable or inventories are liquidated and cash becomes available the scrip is redeemed.

Scrip dividends are often used to pay off accumulated preferred dividends. The scrip is redeemed when cash becomes available or may be converted into additional stock.

After the Westinghouse reorganization in 1891, the first dividend of 1¾% on the preferred stock was issued in scrip, so as not to reduce the working capital immediately. In the fall of 1914, the Cambria Steel Co. desired to keep up its regular 5% dividends, but on account of war conditions inventories were larger than usual, and available cash resources were smaller than usual, and the directors did not think it wise to pay out in cash the $562,500 required. The difficulty was solved by issuing a scrip dividend bearing 5% interest. The same thing was done in 1915. Since then all this scrip has been paid. Sears, Roebuck & Co. paid a 2% scrip dividend in the early part of 1921, but perceiving that the crisis before the company was more serious and of longer duration than at first supposed, suspended common stock dividends thereafter.

The payment of accumulated dividends on preferred shares has been, in a number of cases, taken care of in this manner: The Trenton Potteries Co. has outstanding $411,570 of "funding certificates" which were issued to stockholders who exchanged their 8% cumulative preferred for a new issue of 8% non-cumulative preferred. These stockholders received 44%, being the amount of their dividends in arrears, in the form of "funding certificates," bearing interest, if earned, at the rate of 4%.

STOCK DIVIDENDS.—A stock dividend is a dividend declared by a corporation which is payable by an issue of its capital stock. The stock dividend represents **capitalized surplus** reinvested in the business.

The purposes of a corporation in paying a dividend in stock are generally given as follows:

1. To give stockholders tangible evidence of the increasing value of their property.
2. To maintain the market value of the stock at a low price in order to encourage investment by the small investor.
3. To veil huge profits in order to be able to pay a smaller dividend on a larger amount of stock instead of a larger dividend on a smaller amount of stock.
4. To evade possible taxation of surplus by government.

In the first instance, the stockholders receive shares which represent capitalized surplus earnings reinvested in the business. Generally, the company is able to pay out a larger amount of net profits in dividends, but desires to do so without increasing the rate. A stock dividend permits this to be accomplished. The corporation should be able to maintain its previous dividend rate in order that the market value of the stock shall not greatly decline. The risk of overcapitalization on the basis of earning power should also be considered.

Even though the rate per cent of dividends on the old stock is not maintained but only the same number of dollars in dividends is paid, the market price is not likely to fall in proportion to the increase in stock outstanding. As a result the stockholder benefits by an increase in the cash value of his total holdings.

No fault can be found with those corporations which occasionally pass on to stockholders tangible evidence of accumulating surplus profits. Especially is such a policy commendable when stock dividends are specified as being in the nature of extras and when the earnings and assets of the corporation are adequate to continue payment of the current rate of return on new as well as old shares. The company should, however, consider carefully the probable future trend of the industry and of business in general before the new stock is issued to holders of outstanding stock. The amount of the surplus remaining after a portion has been capitalized and the risks of a possible deflation period should be carefully weighed.

STOCK DIVIDENDS AND MARKET VALUES.—In the main there are two reasons for desiring to pay stock dividends in order to decrease the market price of the stock: (1) to bring the market price down to a point where small investors will be attracted to it; and (2) to lower the market price in order to facilitate pool manipulation by insiders who desire to unload on the public shares of questionable value.

The first purpose is entirely legitimate and results in increased popularity in the market for the company's stock which stabilizes the price and widens the market for future issues of securities. Generally, the increase in stock in such instances is accompanied by a statement that the cash dividend rate per share will be reduced, but that the same number of dollars will be paid out in dividends as before. Thus by reducing yield per share, the market price may be lowered. If the rate of dividend per share remained constant, only a temporary decrease in price would occur during the period when the new stock was being absorbed. In some cases par value has been changed from, say, $100 to $25, and the old dividend rate maintained. This has succeeded, together with the increase in capital shares, in lowering the market price of the stock.

The second purpose is not justifiable. If the stock is valuable, no such tactics need be employed to sell it. If it is not valuable, manipulation for purposes of sale is wrong.

STOCK DIVIDENDS TO CONCEAL PROFITS.—Before utility and railroad commissions had begun to control the accounting methods and capital issues of the corporations over which they exercise control, and before publicity with reference to assets, earnings, and dividends was required, stock dividends were useful in concealing earnings which otherwise would have been considered as profiteering. A concern paying 20% on its capital stock could, by declaring a 100% stock dividend, show only 10% paid on common stock. Thus public ire and possible legislation might be staved off and competition discouraged.

Few people are now deceived by such juggling. Income and profits relative to total invested capital are considered and not the rate paid on stock. Cor-

trol by commissions over public utilities and railroads has put a stop in this field to the practice of "watering" by the issue of stock dividends.

STOCK DIVIDENDS TO AVOID TAXATION OF SURPLUS.—Many corporations with huge accumulated surpluses have become unduly alarmed for fear these reinvested profits will be taxed by the government. In order to evade this possible tax, large stock dividends have been declared. Such dividends are called "melons" and should be distinguished from the more frequent and much smaller (2 to 10%) stock dividends. It is obvious that, should Congress decide to do so, surplus as of a date prior to the declaration of such dividends might be taxed.

Surplus

SOURCES OF SURPLUS.—The most important sources of surplus are:

1. Reinvestment of profits.
2. Sale of stock at premium.
3. Sale of assets for more than book value.
4. Donation of stock to corporation.
5. Gift of assets to corporation.
6. Stock assessments.
7. Writing up asset book values.
8. Excess of value of assets of a corporation absorbed over par of stock paid for those assets.

REINVESTMENT OF PROFITS.—The **most important source** of surplus in a well managed corporation is from earnings retained in the business. The desirability of accumulating profits in surplus cannot be emphasized too strongly as it indicates successful operation, conservative management and financial strength. A surplus built up in this way also indicates the probability of further increase from the same source.

In this country the accumulation of surplus out of earnings is conceived almost wholly as a source of fresh capital. As such it is to be contrasted with the policy of paying out all, or nearly all, the earnings in dividends and relying upon fresh issues of securities in order to obtain new capital when needed.

The great **advantage of securing capital through issues of securities** is that it may be more quickly obtained and thus advantage may be taken of conditions which favor rapid development. Assume that two competitive corporations start to do business at about the same time with the same amount of capital, and that one corporation depends solely upon its accumulating surplus for the capital with which to finance extensions, while the other corporation distributes most of its earnings in dividends but is successful in raising fresh capital by the sale of securities. If both corporations are able to work peaceably side by side, it is probable that in the long run the first-mentioned policy will prove sounder and more profitable and that the stockholders in this first corporation will eventually reap the benefits of their self-denial. But possibly both corporations cannot work side by side. As they expand, one or the other is certain to get the mastery, to capture the market, and to drive its competitor out of business. Under these conditions it may well be that the second corporation, through its policy of selling securities, may be able to raise needed capital more quickly and thus secure the dominating position which is the goal of both, before the first corporation has made a good start.

Somewhat similar conditions frequently exist. A corporation formed to manufacture and sell a new device may find it vitally necessary to cover its

field before some other device can be brought out and introduced as an effective competitor. Or a company may have in hand a project which is peculiarly timely, such as accepting a new and profitable contract. In all cases where the element of time in developing a business is a factor of great importance, the advantage as between the two methods rests with the plan of issuing securities.

The great **advantage of securing capital through savings** consists of the **steadiness and soundness** with which the business may in this way be developed. It will not suddenly spurt ahead—perhaps before adequate preparation has been made or before an effective organization can be brought together. It will grow, year by year, adding a new piece of machinery here, erecting an addition to its plant there, gradually increasing its organization—until some day it finds itself a leader among its competitors. Something like this, as has already been intimated, was the history of the Carnegie Steel Co.; a still more striking instance of inside financing is furnished by the history of the Ford Motor Co.—in fact, this has been the history of probably 75% of the great industries of the country. The other 25% have been built up chiefly by the more rapid, more attractive, and more dangerous process of bringing together great sums of capital through the issuance of securities.

There are no rules which can be dogmatically laid down to guide the financial manager with reference to the portion of profits which should be reinvested in the business. The Pennsylvania Railroad Co. followed for years the policy of reinvesting a dollar for every dollar paid out in dividends. This rule-of-thumb is largely responsible for the investment status of Pennsylvania stock. In the last analysis, the portion of surplus profits to be reinvested must be determined in the light of factors peculiar to the individual business and in the light of the trend of the business cycle.

SALE OF STOCK AT A PREMIUM.—Paid-in surplus results from the sale of stock at a premium. In **banking, insurance and investment companies** a paid-in surplus is usually provided for when such concerns are organized. At least a moderate surplus must be shown on the balance sheet of such a company to give an appearance of strength so that its financial statement may inspire confidence. The laws of many states also require banking companies to accumulate a surplus above liabilities, which shall not be used for the payment of dividends. By subscribing this surplus at the beginning, the stockholders may draw dividends on the capital stock after the first year of business. Furthermore, at a critical time in the history of a bank or insurance company the stockholders are frequently required to subscribe to the surplus in order to maintain the unquestioned credit of the company. In all such cases the surplus is regarded to all intents and purposes as a part of the capital stock. In no sense is it a reserve for dividends; and if, under extreme provocation, the directors consent to distribute a part of the paid-in surplus to stockholders, the report of their action does irreparable injury to the credit of the company.

Sometimes the premium on stocks sold by the corporation above par is added to surplus and used for dividend purposes. Such premiums are capital contributions and should be credited to a special surplus account known as **"capital surplus"** or more specifically to an account **"Premium on Capital Issues."**

Premiums received on bond issues should be amortized over the life of the bonds as the premiums are not contributions of capital but merely represent an offset against the annual interest charge. The yearly adjustment equalizes the interest account.

SURPLUS FROM SALE OF CAPITAL ASSETS.—In conservative financial management it is not considered good practice to **appreciate capital assets in the books** of the concern. The market value of such assets may, however, be more than the book value and when sold may realize a profit. These profits may be added to surplus. Although such profits are available for dividends, a more conservative policy is to show such profits in a special account which will indicate that they are to be used as an offset against possible future losses in the sales of capital assets. Very often, however, such profits are kept in the surplus account.

SURPLUS FROM REORGANIZATION.—Sometimes a credit to surplus may be set up on the books through a readjustment or reorganization of a corporation's financial structure. The same may be accomplished by the purchase of one company's assets by another, or where a new company takes over the going business of several other companies. If a smaller par value of stocks, bonds or notes is paid than the book value at which the assets are acquired, the difference may be carried to surplus.

It is impossible for a corporation to start business with an earned surplus. When one corporation buys another the surplus of the latter merges into some capital account.

HIDDEN OR SECRET SURPLUS.—A number of old and well established concerns may be said to have a hidden or secret surplus. Generally such a condition is brought about by an **understatement of assets or an overstatement of liabilities, or reserves.** The result is that the corporation is in a stronger financial position than is shown by the books.

A secret surplus may be established by one or more of the following methods:

1. Understating net income over a series of years.
2. Excessive writing down of the book values of tangible and intangible assets.
3. Making larger provisions for reserves than is necessary.
4. Overstatement of liabilities.

The chief reasons for a hidden surplus are:

1. To strengthen the financial condition of the concern. By having a secret surplus unexpected losses may be absorbed without serious difficulties to the concern. A secret surplus also serves to check demands of stockholders for dividends and permits the reinvestment of profits for the increased needs of the business.

2. Conceals the true financial condition of the company from stockholders so that those in control can carry out their plans which may be for the betterment of the concern or for their personal benefit. The insiders knowing the real condition of the concern might buy the securities of the company from the public at a low price and make large profits when the actual condition of the corporation becomes known.

The real purpose of a financial manager is to state the condition of his company with accuracy and honesty. The balance sheet should reflect the exact truth so that every creditor, stockholder and prospective purchaser may have a correct basis for action. An understatement of assets and carrying a hidden surplus is objectionable, although not to the same extent as an overstatement of assets. Nevertheless the practice should not be encouraged.

SURPLUS POLICY.—In formulating a surplus policy it is necessary to use considerable discretion and diplomacy in dealing with the stockholders and to satisfy their wishes from time to time by distributing extra or special dividends in prosperous years. The problem is further complicated by the

difficulty, in fact, impossibility of determining in advance what the earnings will be over a number of years and what the future capital requirements will be. For these reasons it is impossible to lay down exact rules, but most well managed corporations are satisfied if they can adopt a conservative surplus policy which fits their particular requirements.

A business of a stable nature with slight variations in earnings, with a policy of a fixed dividend will have relatively regular additions to surplus. The surplus will accumulate steadily, either slowly or rapidly, depending upon the amount retained after payment of dividends. **A speculative business** with fluctuating earnings which wishes to steadily increase its surplus must do so by adopting a fluctuating dividend policy. Dividends will fluctuate because a fixed amount must be set aside periodically to increase surplus. Where the dividend policy is conservative and absorbs a small proportion of average earnings for dividends, a greater proportion will be added to surplus in prosperous years than in poor years. The result will be an irregular addition to surplus.

A concern which has steady earnings generally has no trouble in raising fresh capital for any extension that may be required. Such a concern can usually obtain capital by new security issues and it is not so necessary that all the additional capital should be provided out of earnings.

A speculative business cannot, on the other hand, secure additional capital by security issues on as favorable terms. Such a business, however, can be extended by a liberal reinvestment of earnings. A policy leading to the establishing of a large surplus is probably the best one to follow for such a business.

Financial Aspect of Patents

PATENT A MONOPOLY.—A patent is **a monopoly** recognized by the Constitution and by the statutes of Congress. As stated in a decision of the Supreme Court of the United States, "A patent is a grant of a right to exclude all others from making, using, or selling the invention covered by it." (*United States* v. *Standard Sanitary Mfg. Co.*, 119 Fed. Rep. 172, affirmed in 226 U. S. 20.) Patents are issued by the United States Government only to individuals who have personally conceived a patentable idea and diligently reduced it to practice. A **corporation** as such cannot have a patent issued to it directly in its own name. Letters patent are **assignable,** however, and corporations can obtain title to them by purchase from other owners or by assignment from their own inventors, who secure the patents as a result of their activities as employees of and for the benefit of corporations. It is a matter of common occurrence for a corporation to be in possession of all the rights and benefits of a patent and yet not be the legal owner of it. This is merely a matter of contractual arrangement whereby exclusive rights under the patents are assigned, but the legal title to the patent is retained by the nominal owner. The problems in connection with such contracts or leases are essentially the same as those involved in the ownership of patents, and need not be separately discussed.

PATENT COSTS AND VALUES.—The financial executive must have a definite policy of differentiation between **asset values** and **expense items** for the purpose of recording various expenditures in connection with patents in the books and records of the company. Whether an item shall be treated as one or the other depends primarily upon the general policy of treating patent values adopted by the company. Many corporations carry their patents upon the books at a nominal value and treat all expenditures as operating expenses of the business

for the period in which they are incurred. This may be considered **ultra-conservative practice,** but there is much to commend such treatment. There is always the possibility of infringement suits which cannot be successfully combatted because of insufficient finances or lack of meritorious legal grounds. The **feature of obsolescence** must also be considered because if the patented article, process or design is no longer desirable, there is little or no value to the patent. When a patent becomes of no commercial value because of these or other reasons, the business which has absorbed the major portion of patent cost in its past operating expenses, is in a stronger financial position to stand the reduction of income incident to the lack of usefulness of its patents. It is a severe blow to a company to be obliged to write off high capital values of worthless patents and in addition to pay the legal expenses connected with an unsuccessful attempt to defend them.

TREATMENT OF PATENT EXPENDITURES.—If it is decided to carry the patents among the assets of the business at their cost, there must be a consistent policy of segregating items which should be carried as **assets,** from those which are to be treated as **operating expenses.** When patents are acquired by purchase, the problem is simple. The **purchase price** of the patent plus the legal and incidental expenses connected with the purchase represents the cost, which may be capitalized. **Patents obtained by the inventor** and assigned to his employers present a more complicated situation. If there is an experimental department, while it is not expected that all of the time and money expended will result in patentable ideas, such a department should produce sufficient inventions to justify its cost. As the entire activities of such a department are directed toward the conception of patentable ideas, the total cost of such a group should be allocated to the patents obtained. In view of the length of time which frequently elapses between the filing of an application and the granting of a patent, this method cannot be followed with mathematical precision but some arbitrary distribution which closely follows the idea can be made by the executive.

Tests of the validity of patents by means of lawsuits for infringements are of frequent occurrence. If the suit is successful the value of the patent may be greater because of it, and it may be proper to capitalize **the expenditures for legal services.** But if the result is unfavorable, not only must the cost of the suit be charged to expense but also all the costs previously capitalized on account of the patents invalidated by the decision of the court. It is conservative practice to treat costs of litigation as operating expenses of the business until the case is decided. Then, if a favorable decision is obtained, the costs may possibly be transferred to the asset account. In some foreign countries it is necessary to pay **annual renewal fees** in addition to the original costs involved in obtaining the patent. These should be treated as expenses of the period for which they are paid.

PATENT VALUATION ON BOOKS.—It is sometimes contended that patents should be carried on the books and displayed in the balance sheets at fair values even though they may be in excess of cost. In the past there have been many cases, particularly in connection with corporate promotions, where patents have been carried at values far higher than was justified. This abuse has caused bankers and other intelligent readers of financial statements to look askance at book valuations of patents. There are, however, many cases where the real values of the patents are substantially in excess of the cost. Such values are demonstrated by the profits derived from the patents. In these meritorious cases there is no justifiable reason for not **revaluing patents** and

showing them on the books and in the published reports at their actual values. Whenever this is done it is imperative that the effect of such a revaluation upon the surplus of the company be portrayed in all of the financial statements issued by the corporation.

DEPRECIATION OF PATENTS.—The purpose of patent depreciation is to exhaust the book value of the patents during the period when they are of value to the company. The policy adopted by a concern for such depreciation depends upon the **nature of the patents** and their **probable term of useful value.** The value of a patent to its owner or assignee in the final analysis is based upon the monetary return which it is capable of producing. Hence financial benefits can be obtained from a patent only during the period when a demand for the patented product exists. It is the problem of the executive not only to determine when this period of time has elapsed, but as far as possible to anticipate it.

Depreciation on Basis of Legal Life of Patents.—It is probable that a majority of patents which have passed the test of commercial demand are of value during the entire period for which they are issued. Unless it is known that a patent will be obsolete and of no value before the expiration of its legal life, it is proper to begin to extinguish the cost proportionately over the term for which the patent is granted. This involves consideration of two factors: (1) the **original cost** of obtaining the patent, and (2) **costs accrued** since the issuance of the patent. The first factor should be depreciated over the legal life. If this is seventeen years, as is usual, 1/17th of the cost would be charged off each year, thereby completely extinguishing it by maturity. The second factor, costs after issuance, must be depreciated over the life remaining after the expenditure so that it will be eliminated from the books when the patent expires. A simpler way of arriving at the annual depreciation charge is expressed in the following:

Let A = Original cost of the patent
Let B = Subsequent cost of the patent
Let C = Cumulative depreciation

Substitute the book figures at the beginning of the fiscal year for the letters in the following fraction:

$$\frac{A + B - C}{\text{Remaining life of the patent (months or years)}} \times \frac{\text{Units (months or years) in the fiscal period}}{} = \text{Annual depreciation}$$

The result obtained is correct provided the depreciation in past years has been provided for and properly calculated. If too little depreciation has previously been written off, the resulting annual depreciation charge is more than the theoretically proper amount for the fiscal period. If **prior depreciation** has been too high, the reverse is true. If depreciation has not been taken in prior years, a taxpayer is not entitled in one year to deduct for federal income tax purposes a greater amount for depreciation than would otherwise be allowable.

Depreciation on Basis of Less than Legal Life of Patents.—Patents frequently **become obsolete** and of no value prior to their legal expiration. For example, patents covering novelties, fads, and the like rarely have a value after the business season. The cost of such patents should be written off during the period when the product is in demand. More often the problem is not so simple as the case just cited. There are numerous cases where large sums of money are expended in developing a new process of manufacture with the intention of patenting the process and inducing other manufacturers to adopt the methods

involved and pay royalties to the patentee for the use thereof. If the new process involves radical changes from existing methods and requires drastic changes in equipment, there is always the possibility that it will be difficult to convince prospective licensees of its advantages and to derive the financial return expected and required from the investment in the patents covering the process. The financial executive must be prepared to judge whether such experiments are proving too costly and should be abandoned, or whether the probabilities for eventual success are strong enough to continue the investment. In a business of moderate size the financial future of the company may depend upon his decision. No set rule can be established for the proper policy of depreciating costs of such patents, but the financial executive can best safeguard his business by adopting the conservative policy of liberal depreciation on any patent investments of questionable value.

PROFITS FROM PATENTS AFTER EXPIRATION OF PATENT RIGHTS.—The value of a patent may persist after its expiration. This is due sometimes to the **registration of the trade name** of the patented article, thereby restricting its sale under a similar name; sometimes to the relations with distributors and the **good-will of customers** which competitors may not be able to disrupt; and in other cases to the ability to produce and sell the patented article at prices which **minimize competition** because of the methods evolved during the period of patent monopoly. Such a value may exceed the cost of the original patent, but it is really an element of good-will and not a patent value.

But this ultimate value cannot be predicted in the early years of life of the patent. The **sound course** to pursue is to depreciate the patent over its life. The value after expiration should not be capitalized and set up on the books because no element of good-will created in the current business is ordinarily capitalized by a going concern. The reason for this is that surplus available for dividends is no greater by reason of appreciation in value of an asset not to be sold, except as augmented by actual earnings derived therefrom. The value may be given effect, however, in any reorganization whereby capital stock is issued for good-will or patents.

INCOME FROM PATENTS.—Revenue from patents may be derived from the following sources:

1. Sale of the patents.
2. Profit from the manufacture and sale of patented commodities.
3. Royalty payments from others for the use of patents.

Profits on Sale of Patents.—The profit or loss from the sale of a patent is measured by the difference between the amount received and the cost of the patent, less cumulative depreciation to date. If the sale is made with a provision that the transferor of the patent shall participate in its future earnings the profit or loss should be determined in the same manner. The future revenue from the profit participation in the profit should be treated as income for the period in which it accrues or is received.

Profits from Use or Sale of Patented Articles.—The second source of income is from the use of the patent in the business. The patent may cover a process of manufacture which reduces the cost of production under non-patented methods; it may cover a product, and because of the monopoly of manufacture permit the patent owner or assignee to sell the patented article at prices much higher than it could be sold for under competitive manufacture and sale. Regardless of the nature of the patent, the management should know the **approximate value** of it measured by the amount of excess earnings attributable to the patent. In attempting to determine this value, it is preferable to

determine the excess earnings or profit by means of statistical computations. Attempts to insert an arbitrary element of estimated profit as an integral part of the accounting records, and thereby combining such arbitrary estimated profit with elements of actual cost, frequently cause much confusion, particularly in the valuation of inventories.

Exclusive Use of Patent within the Business.—A decision which sometimes has to be made and frequently has an important effect upon the future growth and financial strength of a business, is whether or not to permit others to use the patented idea in a competing business. Many large businesses have been built up by reserving for their sole benefit the commercial advantages of patents. Doing this frequently requires extensive expenditures of money to bring the idea to a profitable fruition, and the financial executive is primarily responsible for obtaining and maintaining the requisite funds for this development. At the time this decision has to be made, particularly if the business is comparatively new and not abundantly supplied with cash and good credit connections, it may be that the only means of deriving the benefits expected is by the participation of others whose financial condition is of assistance. To make such a decision wisely requires intimate knowledge of many conditions and the financial executive should at least be able to contribute data as to the comparative possibilities of income under both methods.

If it is decided to **license others** to operate under the patents, **contracts** are prepared setting forth the extent of the rights of the **licensee.** Generally the **licensor** derives his income from a fixed **royalty return,** the amount of which is based upon the quantity of the patented article produced or sold by the licensee. In the absence of good reasons to the contrary, license contracts should contain a provision for the payment of a **minimum royalty,** whether or not the licensee avails himself of the advantages of the patent. This provision prevents a licensee from obtaining valuable patent rights and thereby, at no expense, eliminating them from competition with his own established business. The licensee should be required to submit to the licensor at frequent stated intervals —generally monthly—a **statement of the amount due,** with statistics as to quantities produced or sold. The statement should be executed before a notary. It is the duty of the financial manager to see that the amounts due as stated in returns are received currently, and also to assure himself of the accuracy of the statement submitted. This verification is frequently accomplished by an **audit of the licensee's records** and the right to make such an audit should be made a part of the license agreement between the parties.

PROTECTION AGAINST INFRINGEMENTS.—There is the further problem of protecting the owners and licensees of a patent or patents from illegal use of them by others who are not licensees. Close contact with the industry involved is of assistance in detecting such infringements, and when detected, they should be stopped as soon as possible, even by **invoking the aid of the courts** if necessary. An investigation to ascertain net income realized in the manufacture of patented articles, when infringement of patent rights is claimed and the claim is sustained, or when an examination is ordered pending a decision, presents several novel features, as compared with an ordinary statement of income. It is not intended to discuss the matter from a legal point of view, and it may be that the principles hereinafter set forth may not be upheld by the courts in some jurisdictions. However, most of these cases **are settled out of court** owing to the enormous expenses involved in the taking of testimony before masters, who are usually appointed where matters of account are involved.

The following procedure, therefore, may be taken as the result of actual practice, following negotiations which usually involve concessions on both sides, rather than settled rules laid down in judicial decisions.

General Accounting Principles do not Govern.—The **preliminary conferences** in a matter of this sort naturally bring out opinions which differ radically. The injured party claims everything that can be imagined, and the defendant produces a statement which shows that the manufacture of the infringing article has been attended with ruinous losses. From the beginning it is a question of gradually drawing the lines closer, until each has stripped his case of redundant matters and the issue is joined. Ordinary accounting principles do not form the basis of the claim nor of the defense. The following are exceptions to accepted practice:

1. There seems to be no reason for apportioning any part of the **general expenses** as a part of the cost of the business. The infringers would have had these expenses to pay in any event in order to carry on their legitimate business.

2. If the principal business of the defendants consists of manufacturing or dealing in infringing articles, it may be proper to include a certain part of the general expenses, but items of a questionable nature should not be included.

3. As defendants are not supposed to have pushed the sale of the article, it hardly seems proper that any credit should be claimed for special exhibitions.

4. If the **same kind of materials** is legitimately used in the manufacture of other goods handled by the defendants, and the purchases are not earmarked at the time for any particular department, it seems improper that credit should be allowed for any materials not clearly identified as having been used in the infringing product.

5. Based on similar accountings, the defendants are not entitled to place a **scrap valuation** upon materials remaining on hand when they were compelled to stop the sale of the article, but they could be compelled to scrap the articles on hand at that time, and would not be entitled to any credit whatever for the entire cost of the manufacture of said stock.

It does not seem conceivable that the defendants would be permitted to make a profit out of their wrongdoing, and this would be the result if general expenses and similar items were included, as the tendency would be to reduce the expenses of conducting their legitimate business. If they have been ordered to account for the profit made by them in the manufacture and sale of articles, the courts undoubtedly should hold that the word "profit" as here used means the difference between the proceeds from the sale of an article and the prime cost (that is, labor and material) of such sales, and that the cost of goods on hand at the end of the period should not be treated as an item of cost for which credit can be claimed.

Court Decisions.—The courts, however, do not seem to accept the foregoing view. In the case of *Rubber Co.* v. *Goodyear* (76 U. S. 788), where a master's report was being commented upon, the court said:

"He refused to allow manufacturer's profits and interest on the capital stock. This was correct. 'The profits made in violation of the rights of the complainants' in this class of cases, within the meaning of the law, are to be computed and ascertained by finding the difference between cost and yield. In estimating the cost, the elements of price of materials, interest, expenses of manufacture and sale, and other necessary expenditures, if there be any, and bad debts, are to be taken into the account, and usually nothing else. The calculation is to be made as a manufacturer calculates the profits of his business."

GENERAL RECORDS.—In order to maintain efficient accounting records and for purposes of general information, it is necessary for a concern to know the status of its patents and applications for patents at all times. In a business which does not have its own patent department with competent patent attorneys, records should be kept to show what patents have been issued and the progress made in connection with applications. The length of time elapsing between the filing of an application and the issuance of a patent varies considerably, and it may be several years before a final decision is reached. Some cases are passed promptly by the patent office, while others encounter considerable delay because of the necessity of amendments to the applications, appeals from rulings of the patent office, hearings in connection therewith, and the like. The financial executive should see that his records provide for the information tabulated below or as much thereof as it is feasible to maintain:

1. Name or title, and description of invention.
2. Name and address of the inventor.
3. Name of attorneys handling the application.
4. Serial number of the application and the date filed.
5. Actions while the application is pending in the patent office, including the dates of amendments; reference to briefs, arguments and interviews in connection with appeals from rulings; number of claims rejected and allowed; date application was abandoned or (see 6).
6. If the patent is issued:
   Date; patent number; life and expiration date.
7. Location of the patent (file, safe deposit box, etc.).
8. Record of infringements and action taken thereon.
9. Date and essential details of sale, assignments of partial or complete rights, etc.

To insure the accuracy of a record such as this, frequent contact with the attorneys handling the various cases is necessary.

TREATMENT OF PATENT ACCOUNTS.—The accounts and records should be designed so as to show amount of money expended on (1) pending applications for patents; (2) obtaining and protecting issued patents; (3) depreciation of patents; and (4) income from patents. Charges for the cost of patent applications prior to a final decision on them should be treated as **suspense items** and the aggregate cost involved carried in a separate controlling ledger account. This account should be supported by a detailed record showing the expenditures on each application. When a patent is issued, the cost should be transferred to the **patents account,** but if the application is finally rejected, the accumulated costs should be written off to expense immediately. The costs of patents should be carried in one or more ledger accounts, depending upon the desirability of classification of patents by types, and there should be corresponding **depreciation reserve accounts** to which should be credited the annual provision for patent depreciation. As supporting record for these accounts, a **patent ledger** should be maintained which will show the details of costs by patents and also record the depreciation taken on each patent.

Income from royalties under license contracts should be reflected in one or more ledger accounts. The executives of a business frequently want to know, not only the total income received monthly or periodically as royalties from licensees under the various patents, but also how much is received from individual licensees. In order to have this information available, subsidiary records of income should be kept.

SECTION 8

FIXED CAPITAL EXPENDITURES

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SECTION 8

FIXED CAPITAL EXPENDITURES

During the readjustment of the post-war period of 1919 to 1924, the importance of proper control of fixed capital investments was brought home forcefully to bankers and financial executives. Many concerns with years of successful experience found themselves suddenly confronted with depreciation, interest and other carrying charges on war-time capital investments that threatened to impair profits, frequently eliminating them altogether, and in some cases bringing about financial disaster.

CONTROL OF FIXED CAPITAL EXPENDITURES.—The policy governing fixed property expenditures should rank in importance with other fundamental policies for the conduct of the company's business, such as quality of product, merchandising methods, employees' relations, etc. The effects of a wise or unwise policy in the handling of the fixed capital expenditures are permanent, far-reaching, and frequently the determining factor in success or failure for the concern.

The fundamental principles involved apply with equal force regardless of the type or size of the concern. In a small business the investments in fixed capital are usually subject to the control of the owner or manager, who is in close touch with all phases of the activities of his business and is in a position to establish a proper balance between these activities without the need of a definite program of reports and records. The executive of a large organization cannot personally supervise the activities of all departments and must rely on **controlling ratios, comparative reports** and **previously approved programs** to insure the continued application of the predetermined policies.

CONSERVATIVE POLICY.—When a business makes expenditures for added fixed assets, it inevitably incurs an **added burden of expenses** in the form of such more or less fixed charges as depreciation, insurance, taxes and protection, as well as an added financial burden in the form of interest or dividends which should be earned on the increased capital invested. A conservative policy demands that only such additions to fixed assets should be made which will result in an increased volume of production or trade, or will enable the business to effect a definite saving in the cost of production. In either case it must be established that the advantages realized from the added investments expressed in terms of increased earning power will be sufficient to merit the increased expenses and pay a return on the additional capital invested. Not only must the earning capacity of the added investment be assured for the immediate future but consideration must be given to **its permanence as compared with the estimated life of the improvement.** An expansion of physical property to care for a temporary increase in volume or to effect a saving in production expenses during a boom period would be unwise even though the failure to make such an investment might result in a temporary loss to the company

xpenditures for material or goods are subject to liquidation if the purchase found to be unwise, but expenditures in fixed capital assets which prove to unproductive are seldom possible to liquidate except by reorganization or a emendous sacrifice of earnings over a long period of time. In the meantime ie added expenses keep running and become a heavy handicap on the com-any's finances.

A striking instance of failure due to overexpansion of an otherwise successful anufacturing business is found in the history of a concern which started in 86 with sales amounting to less than $10,000,000 on which a net profit of er 16% was realized. Expansion continued and the company organized reign departments and factories. It financed interurban electric railway ies for the purpose of exploiting inventions, and advanced large sums to nproductive subsidiary companies. By 1906 its total funded and current abilities and stocks had risen to $45,000,000, but the net profit was a little er 5% of its sales. As a small business in a year of depression the concern d earned 16 cents on every dollar of sales. As a larger business in a year of arked prosperity it earned 5 cents on each dollar. It failed the following ear.

RELATION TO COMPETITION.—The effects of unwise fixed capital vestments are most keenly felt where a concern is compelled to meet sharp mpetition. Many industries having at present productive facilities installed ring the boom period occasioned by the war, which are far in excess of esent or probable future requirements, must now exert every effort to obtain e physical volume necessary to absorb and carry the burdens of fixed charges. he keen price competition resulting from this condition reduces the net profits joyed by all industries in the line, and a business so burdened with heavy ed capital assets is confronted with a **decreasing margin of profits** after the yment of carrying charges on its fixed capital investments.

The advantages and disadvantages of competing companies in any line of siness is shown by a comparison of their financial reports. The handicaps casioned by excessive fixed property investments in some companies are ten equivalent to their dividend requirements. For example, assuming two ncerns in the same line of business, and with practically the same commercial unsactions and gross earnings, one company having conservative fixed property vestments may earn its dividends by a comfortable margin, whereas a concern th excessive property investments may have difficulty in meeting its interest, preciation and other fixed property charges with little or nothing left as a turn on its net worth.

TURNOVER ON FIXED PROPERTY INVESTMENT.—The turnover on ed property investment expresses the relationship between the volume of siness done and the amount of capital tied up in fixed property investments. is is one of the most fundamental relationships in an industrial enterprise. he turnover may be **figured in either of two ways:**

1. As the dollars of sales per year per dollar of fixed property investment.
2. As the physical units of volume per year (pounds, barrels, cases, etc.) per dollar of fixed property investment.

these the latter is the sounder, for it is based on fixed measures which are affected by changing price levels.

Computing this turnover **on the basis of sales** and fixed property investment satisfactory in normal times when prices are steady. But prices for products ve fluctuated so greatly in recent years that changes in this turnover might misleading unless changing price levels are recognized. Where no measure

of physical volume is available, it may be approximated by adjusting the sale figures sufficiently to eliminate the effect of changing price levels. This may b done by use of a price index. Published price indexes may be employed whe they are fairly representative of the trend of values of the particular produc in question. Oftentimes an individual price index may be readily prepare on the basis of representative items of products handled.

All proposals to increase fixed property investments should take into con sideration the effect upon this turnover. Additional property investmen should be justified by a similar relative and permanent increase in volume business, in order to protect this turnover. To expand properties on temporar volume, or on volume resulting from inflated prices, would be most uncon servative. The trend of this turnover is an indicator of the trend of **unit fixe property expenses** on the volume of business done. As the turnover improve the unit expense decreases; and as the turnover decreases the unit expens increases. As the fixed property expenses—depreciation, taxes, insurance, et —bear quite a constant relation to the amount of fixed property investmen volume changes mean better or poorer unit costs and expenses, and are als directly reflected in the turnover.

FIXED PROPERTY FINANCIAL AND EXPENSE BURDENS.—A effective method of emphasizing this point is to compute the **added expens burdens** of a more or less permanent nature imposed upon a business by an proposed increase in fixed property investments. As a general rule addition fixed property investments carry increased financial and expense burdens about 20% of the amount of such increase in property investment. This woul be made up approximately as follows:

1. Financial cost of the added investment—increased interest and dividend requirements	9%
2. Average depreciation on building and equipment investments might be	5
3. Necessary repairs, taxes, insurance, and miscellaneous expenses might average	6
Total	20%

These are average and round figures, but they are representative of th additional burdens imposed by the average addition to property investment For any individual proposition the increased burdens may be figured ou quite accurately, and it is very effective to state that, for illustration, a pr posed addition of $100,000 will impose upon the business fixed financial an expense burdens of $20,000, which should be covered by the profits fro permanent additions to volume, or permanent savings in cost and expense, f otherwise they will reduce the return earned on the investment.

FINANCING FIXED PROPERTY EXPENDITURES.—Expenditures f additions and betterments for which no new capital is provided, have to con out of **working capital.** From the working capital point of view, such fun are spent as truly as though paid out in dividends. Money tied up in fix properties is no longer available as working capital; it cannot be used to p bank loans, buy goods, or carry accounts.

Important new ventures, extensive construction programs, etc., are general provided for by **special financing.** This would necessarily be the case wi large expenditures. It is the effect of the smaller and more or less regular a constant expenditures for additions and betterments which is overlooked. any going business some such expenditures are necessary every year. Wh they may not be important in any one period, it is the cumulative effect that

importance. In very profitable times, when surplus accounts are being ilt up, such items pass unnoticed; but they accumulate year by year.

PROTECTION OF WORKING CAPITAL POSITION.—Surplus should be nsidered as free surplus available for payment of cash dividends only to the tent that funds realized out of such surplus earnings have not been otherwise id out in reduction of working capital. Surplus profits are first realized in e form of increased working capital. If cash dividends are paid out, both the rplus account and the working capital are reduced. If long-term liabilities e retired, the working capital position should be protected by reserving a like nount from the surplus account. Current expenditures from year to year for ditions and betterments reduce working capital in the same way, and should provided for by an ample surplus account, or **appropriations of surplus** gregated to protect working capital.

A concern might go along for years putting a few thousand dollars each year to additions and betterments, and find that this drain on working capital d accumulated to a sum representing a very large part of its surplus account. ithdrawing such sums from working capital means added borrowings, for if ese funds were not invested, they would remain as working capital. Neces- ry working capital is usually provided by current borrowings, bank loans, c. But there comes a time when added permanent financing is necessary to ver these fixed investments unless covered by earnings retained in the business. Expenditures for additions and betterments should be provided for by appro- iating a like amount from surplus, to assure that the working capital is main- ined. When such expenditures accumulate to a large sum and added per- anent financing is undertaken in the way of a bond or stock issue, the effect to replenish working capital for these withdrawals, and release the surplus propriated to cover. As the issue is floated the amount for the refinancing fixed investments originally paid for out of earnings, may be released from propriated surplus, and transferred back to free surplus account.

NEW CAPITAL TO BE FURNISHED BY STOCKHOLDERS WHEN ORKING CAPITAL IS NOT EXCESSIVE.—Let this question be asked garding every proposed capital expenditure in excess of a fixed minimum: ill the expenditure readily be financed out of surplus earnings? Usually the nswer is "No." It usually will be found that the necessary funds will be se- red from a diminution in net working capital or from fresh borrowing. Either ractice is a vicious one for an industrial concern. If undistributed earnings e insufficient to provide for new capital expenditures, it is obvious that the ncern is **underfinanced.** In such cases the apparent needs should be brought the attention of stockholders and the new money should be contributed by ockholders. Even though the suggestion is not adopted, the mere consider- ion of it may give pause to the business executive who may not have inquired here the capital funds are to come from, or who knows that the concern's edit is still good at the banks. It may be realized that a safe margin of orking capital is to be turned into an unsafe margin, and that the proposed tensions are not worth the risk and may be postponed.

Accounting for Fixed Capital Investments

GENERAL CLASSIFICATION.—Fixed or permanent assets in the broad nse comprise all assets which represent an investment of the concern's funds ot being offered for sale in the regular course of business, the ownership of hich is requisite to the continued operation of the business. They may be

broadly divided between **tangible assets** and **intangible assets** or **deferred charges.** If the fundamental relationships which exist between the tangible fixed property investments and sales volume and operating expenses are to be used by the executives for administrative purposes, it is essential that the classification between these divisions be carefully maintained at all times. The system of accounts should provide a comprehensive and carefully designed classification of fixed property investment, and transfers between departments should be promptly recorded so that the assets used by each department or unit of the business may be readily determined at all times.

TANGIBLE FIXED ASSETS.—Tangible fixed assets are frequently referred to as fixed property, permanent assets or capital assets. The terms are practically synonymous. Such assets represent items of property, either real or personal, which in themselves have a tangible value based on cost of reproduction in its present location and condition. The following types of assets are included in this classification:

Land and land improvements	Tools
Buildings	Delivery equipment
Leaseholds	Furniture and fixtures
Machinery and equipment	Patterns and drawings

LAND.—A careful distinction should be made between **land used in business** and **land held for investment** or for purposes of future growth of the concern and each should be carried separately in the accounts. These accounts should carry the **total investment** including the initial purchase price and all costs and expenses incurred in procuring titles. Subsequent improvements such as paving, grading, filling, materials, etc., should be charged to this account. When a number of different properties are owned, subsidiary records should be maintained showing the value of each parcel of property.

BUILDINGS.—Buildings should be carried on the books of the concern at **the purchase price** or at the cost of construction. Building accounts should be supported by subsidiary accounts showing the investment by buildings and operating units. From these subsidiary accounts, statistics may be readily prepared showing the amount of the investment in the various types of building using different rates of depreciation. In a large organization it may be desirable to establish a subsidiary record showing the building investment assigned to each department and to record changes and transfers between departments as they occur.

LEASEHOLDS.—Leaseholds involving the right to use properties comprising land or buildings or both should be charged into the accounts at cost. Subsidiary records should be maintained showing each leasehold separately. As the value of leaseholds for industrial purposes depends on the life of the lease and the location, trend in property values and development, the original cost of the lease, less any salvage value, should be **amortized over the estimated productive life** of the lease. The cost of all improvements should also be written off over the life of the lease, because they usually either become the property of the landlord at the expiration of the lease or possess little or no salvage value.

MACHINERY AND EQUIPMENT.—The investment in machinery and large units of fixed equipment should be supported by subsidiary records classified that information will be available to show:

1. The value of the machinery and equipment used by each individual department, process or unit of business.

2. The original cost of various classes of machinery and equipment which take different rates of depreciation.

The form of such records may be varied to suit the needs of the individual organization. In a large company, where a comprehensive classification is necessary, **a card record** showing separately the value, age, depreciation rate and other important data for each unit of machinery and equipment should be maintained. Such a card record affords a ready means of classifying the machinery and equipment on any basis that may seem desirable.

TOOLS.—The original cost of tools and movable equipment should be carried in a separate account from the machinery and equipment investments. The accounting to be accorded to such items will depend somewhat on the character of the business. In a business where such investment is composed chiefly of **small tools** of comparatively short life, the practical method is to capitalize the original purchases necessary to carry on plant operations and write off all subsequent purchases to expenses on the theory that such additional purchases will approximate the depreciation realized in such tools.

If the tools are composed of **large or valuable units,** it may be advisable to keep a record of such units and provide a depreciation reserve for ultimate retirement. Dies and gauges may be included as part of this account excepting in companies where such items represent a large investment which may be subject to a high degree of **obsolescence** due to changing styles, in which case provision should be made for a separate account so that proper executive supervision may be assured. The importance of annual inventories and adjustments of these investment accounts should not be overlooked.

DELIVERY EQUIPMENT.—Separate divisions of this account should be made as between **automotive equipment** and **horses and associated equipment.** Investment in such equipment should be carried at cost with ample provision for depreciation. Subsidiary card records should be maintained for each unit of this type of investment. All periodic repairs other than complete rebuilding should not be capitalized but should be charged to current expenses. As in the case of tools, periodic inventories are imperative for such investments.

FURNITURE AND FIXTURES.—In a **manufacturing business** the investment in furniture and fixtures is usually composed largely of office equipment, and as such may be carried at cost providing liberal depreciation is provided. In a **merchandising business,** where a considerable investment is made in fixtures which may be subject to comparatively short life due to changing styles, consideration should be given to the advisability of reducing the investment value by annual write-offs so that such equipment may ultimately be carried at a nominal value before the expiration of its useful life.

PATTERNS AND DRAWINGS.—While a manufacturing business may acquire a large supply of patterns and drawings over a period of years, their investment value is frequently little more than nominal. The conservative policy is to set up the original cost of such items in this account and charge them off to current operating expenses over a period of 3 to 5 years, leaving only a nominal amount in the account.

INTANGIBLE FIXED ASSETS.—Intangible fixed assets are usually composed of any or all of the following items:

Good-will
Franchise rights
Patents
Copyrights
Trade-marks and trade-names
Advertising costs capitalized
Organization expenses capitalized.

These items should on a conservative basis be carried at their actual cost. However, in the majority of cases, they are created at the inception of a business through purchase or reorganization, or during the formulative period when the business is becoming established, and the **capitalization** of them is ordinarily a matter of business expediency based on the financial structure of the new corporation. The directors and executives in charge of current operations of an established business are usually not called on to make any decision relative to these items other than to determine the amount of amortization, if any, which should be charged to current expenses. The financial policy of the corporation is the determining factor as to whether a conservative policy shall be adopted and such intangibles written off against the current operations over a period of years or whether they shall be carried indefinitely among the assets and part of the profits distributed in dividends to the stockholders instead of being used in amortizing the intangible items. Theoretically, good-will, trade-marks and perpetual franchises are not subject to depreciation. Nevertheless, in practice they are written down, especially if they have been carried at an excessive figure, if they are not eliminated entirely. Thus the F. W. Woolworth Co. has written down its good-will from the original $50,000,000 to $10,000,000.

In some companies, it is the policy not only to refrain from amortization of intangible assets established on the books at the time of incorporation but also to capitalize advertising expenses, patents, copyrights and trade-marks, from year to year. This policy results in the **conversion of working capital into intangible assets** and if continued over a period of years accompanied by a liberal distribution of the profits in dividends to stockholders, may easily result in such a diminution of the working capital as to seriously embarrass the company. However, such intangible assets are seldom of material value for financing purposes in time of necessity. Therefore, if it is not practicable to charge such expenditures in total to current expenses, it is more conservative to treat them in the nature of **deferred charges** and write them off as rapidly as possible.

DEFERRED CHARGES.—A distinction should be made between expenditures which may be capitalized as intangible assets and those which should be carried as deferred charges to be written off against operations of future years. Expenditures chargeable as deferred charges are divided between **current and non-current** as follows:

1. Those representing **current prepayments of operating expenses** and other costs of doing business which are usually chargeable to the expenses of the next succeeding business period.
2. Accounts in the nature of development costs, the character of which is such as to require charging to expenses over a period of years rather than capitalization.

The former prepayments are properly classifiable as current assets and may be included with working capital. They are composed of:

Prepaid interest	Prepaid taxes
Prepaid insurance	Prepaid rents

In the latter group composed of non-current deferred charges to be written off against subsequent operations, may appear:

Discount and expenses on bonds issued
Organization expenses
Advertising expenses

Sales development expenses
Exploration expenses, etc.

As noted under "Intangible Fixed assets" many such items may be capitalized at the time the corporation is established purely for purposes of financing or because such expenditures represent preliminary expenses which constitute a real value during the life of the corporation. After a corporation becomes established on an operating basis, conservatism would demand the charging off of such current expenditures to current operations, or if they are of extraordinary volume and applicable to several years' operations, they may be carried as non-current deferred charges. To capitalize such items may easily lead to excessive distributions of dividends and eventual financial difficulties. Expenditures of this character represent little, if any, value in the event of liquidation and should be clearly shown under a separate heading on the balance sheet and not confused with current assets.

Valuation of Fixed Capital Assets

ASSETS ACQUIRED BY PURCHASE.—The conservative basis of capitalizing fixed capital assets is at **cost less depreciation** in all cases, and in the case of land simply at cost, as land does not wear out or become obsolete. Where a company purchases property or machinery as a completed product, the cost is the purchase price plus any expenses incurred in acquiring or installing the property. The purchase price is the actual sum paid, that is, the invoice price less any discount taken. The discount is not an earning but rather a saving due to early payment. Assuming an adequate depreciation policy, which comprehends not only the physical life of the asset but its useful life as well, the **depreciated cost of the asset** will represent **its fair value to the company as a going concern** regardless of fluctuations in the market value subsequent to the date of purchase.

SELF-HANDLED CONSTRUCTION WORK.—Where a concern handles its own construction work, care should be exercised that such construction work is entered in capital accounts at its cost. If this cost is less than it would have to pay a contractor for the work, a saving has been accomplished, but it cannot be said that a profit has been made. The cost of such construction work should include all of the direct costs, together with a normal proportion of overhead. It is this cost which has been expended out of working capital funds by the company. To capitalize self-handled construction at values over the cost and take the difference as a profit, is simply writing up a fixed property investment. If surplus created in this manner is to be expended or appropriated for any purpose, an impairment of working capital would naturally result.

In the case of **home-made machinery and equipment,** the same principles should generally govern, although it is not always easy to apply them. Exceptions may occur where a concern operates on a commercial basis a subsidiary company or a plant which is largely engaged in making machinery or equipment for outside trade. Such a plant or company, being on its own commercial basis, should naturally be paid full value for all of the product it turns out.

OVERHEAD COSTS IN CONSTRUCTION WORK.—Where a concern maintains a staff to handle its construction work, care should be exercised in spreading the overhead costs to construction work. Every job should be charged with all of the supervision and overhead expenses incurred upon it, together with a reasonable proportion of the general overhead of the construction staff.

Items should be allocated to a job directly so far as possible, and should cover the time of engineers, draftsmen, foremen, traveling expenses, etc. General supervision and office expense will naturally have to be distributed on an arbitrary basis, usually the cost of the construction work done. The amount of overhead included in the final cost of construction work should be a conservative charge, not exceeding the amount that would be included if the work were handled by an outside contractor.

IDLE CONSTRUCTION STAFF EXPENSES.—It would be improper to consider all of the expense of a construction staff as a capital charge simply because such a staff was maintained for the purposes of handling construction work. If little work is being done within a period, the excess costs and expenses of carrying the construction staff should be considered as operating expenses. Only those amounts should be charged against construction which represent direct supervision and expenses incurred on jobs, together with a reasonable normal amount of overhead. The unabsorbed portion of the construction staff expenses should be charged off to operations.

APPRAISAL OF FIXED CAPITAL ASSETS.—The requirements of the federal income tax law and the tremendous rise in prices during and since the World War had led to a considerable amount of appraising of the fixed capital assets of industrial concerns by independent appraisers. There are three kinds of appraisals—the reproduction appraisal, the actual cost appraisal, and the retrospective appraisal. The first is made on the basis of **present cost to reproduce,** with or without a deduction for depreciation. If depreciation is deducted, the appraised value is known as the **sound value** of the property. The second type of appraisal, the **actual cost appraisal,** refers to the correct book value of the property or the amount of actual investment it represents, or should represent, less depreciation. The third type, known as the **retrospective appraisal,** is similar to the first except that it refers to some past date.

Among the uses of the reproduction appraisal are the following:

1. To determine the amount of insurance a company should carry on plants constructed or bought prior to the rise in construction costs. The bulk of reproduction appraisals is for this purpose.
2. To obtain loans.
3. To inspire confidence in stock and bond issues that are offered for public subscription.
4. As a basis for negotiating purchase or sale of the company's assets.
5. As a basis for valuations to be used in federal or state tax matters.

Naturally the appraisals for the second and third purposes usually are not undertaken unless the appraised values are expected to be higher than the book values.

Appraisals on the basis of actual cost or original investment, less depreciation, whether for income tax or other purposes, are undertaken simply to revise the fixed capital accounts, and may be made periodically. The company may have been charging too much to expense and not enough to capital, or vice versa, or may have been charging off too much or too little for depreciation and obsolescence. As a result of this type of appraisal a closer approximation is made to the value at which the fixed assets should be carried on the books of the company.

Retrospective appraisals are frequently made in connection with the federal income tax. The gain or loss on the sale of any assets purchased before March 1, 1913, is in most cases computed on the basis of the fair market value on that date, which was the date when the constitutional amendment empowering

Congress to levy an income tax became effective. The fair market value of fixed property as of that date can generally be ascertained only by an appraisal in accordance with comprehensive directions issued by the Commissioner of Internal Revenue.

ADJUSTMENT OF ASSET VALUES BY APPRAISAL.—Many concerns have made appraisals in recent years and written up their investments to **replacement cost.** The basis upon which such replacement costs are priced is very important. It would be very unwise to price replacement costs at war-time price levels. If appraisals are based upon replacement costs, they should always be at normal replacement costs, and not inflated or abnormal costs. There can be no justification for a concern writing up the values of properties which it has held for years to a war-time or abnormally high replacement cost valuation. Whether an appraisal adjustment is a reinstatement of values previously written off, or is simply a recognition of advanced replacement costs, is a question to be determined from circumstances surrounding any particular case.

If a concern has pursued for years an ultra-conservative policy in the handling of its depreciation, additions, betterments and replacements, and finds that the values at which it is carrying its properties are thereby understated, an appraisal adjustment of values of such properties is, in part at least, a reinstatement of values previously written off. For practical purposes the best basis on which to compute these values is the cost to replace at normal price levels less depreciation to date. An appraisal adjustment to reinstate such values cannot be considered as recognition of appreciation. This is not taking a book profit as ordinarily known, but is a correction of past mistakes. An appraisal adjustment that is not a reinstatement of values previously written off, but due to **advanced replacement costs,** is a recognition of appreciation and as such is a book and not an earned profit.

An attempt to distinguish what part of appraisals is **reinstatement of values** and what part a **recognition of appreciation,** often becomes very difficult, and may be more or less a matter of theory. From the practical point of view it makes little difference to the owners of a concern from which source the adjustment comes. The recognition of such enhanced values places burdens upon the business in the way of added costs, the effect of which should be very carefully considered before the adjustment is made. It increases depreciation charges in the measure the valuation is increased, and it may tend to increase taxes and insurance costs. If such an adjustment is capitalized, it brings added financial burdens, from the management's standpoint, in the form of **increased dividend requirements,** which is the most important factor to be considered.

The increase in costs due to heavier depreciation charges is of importance in the measure that costs have an **effect on the prices** and react on the volume of business done. The financial burden in the form of added dividend expenditures on stock issued against such appraisal values is a real money cost growing out of the appraisal. In the light of changes in business conditions in the past few years this is a factor well worth consideration.

Classification of Fixed Capital Expenditures

ADDITIONS, BETTERMENTS, REPLACEMENTS AND REPAIRS.—In a going concern the policy on fixed capital investments is largely determined by its policy relating to its differentiation between additions and betterments on the one hand and replacements and repairs on the other. Every organiza-

tion regardless of size should adopt a **definite policy for the classification of such expenditures** and the charging of items to fixed capital should be carefully supervised.

It is sometimes believed that so long as expenditure for capital outlay, as well as for current maintenance, is charged to income and not capitalized, no fault can be found with such a conservative course, but that the reverse of this practice cannot be justified under any circumstances. Theoretically this position is wrong, the proper rule being to ascertain the correct application of each payment and to charge the account to which the item belongs. Practically, much can be said in support of what is known as the conservative method.

The great difficulty in ascertaining the exact effect of alterations, betterments, and new construction, and the prevailing tendency of managers and others to emphasize the propriety of capitalizing the payments, inevitably educates accountants and business men who do not want to deceive themselves, to the determination to charge to maintenance every item about which there is the slightest doubt. A practice which is objectionable in theory becomes thus a virtue in practice, and a substantial reason therefor is that the business always gains thereby and never loses.

The dividing line between capital and revenue expenditures is frequently closely drawn. In most cases more or less arbitrary working rules must be followed. However, in formulating the policies and methods to be used in handling fixed capital expenditures, an essential element is a determination of what constitutes capital expenditures and current repairs.

A. L. Dickinson defines repairs and renewals as follows:

"Repairs should include all current expenditures recurring from day to day and from month to month on the general upkeep of the existing property without the renewal of any substantial part thereof, and generally all periodic repairs which are necessarily undertaken within, say, 1 year. (This caption will, of course, include certain renewals of small parts, etc., such as would be necessary to continue the useful life of any unit of building, plant, or machinery over the estimated period of its life.)

"Renewals should include all expenditures incurred in renewing, in whole or in part, any unit of building, plant, or machinery, which tends to extend its useful life beyond the average term. These expenditures would in general be those which would only occur at long intervals of 2 or 3 years, and whose effect would last for a number of years afterwards."

The following general definitions of additions, betterments and replacements have been **issued by the Interstate Commerce Commission** in the classification of accounts for telephone and telegraph companies and may be used as a basis of developing similar definitions applicable to any specific industry.

Additions.—Additions are structures, facilities and other properties added to those in service at the time of addition, and not taking the place of any of like purpose previously held by the company. The cost of such additions should be charged to the proper plant and equipment accounts.

Betterments.—Betterments are physical changes in structures, facilities, or equipment, which have as their primary end or result the making of the properties affected more useful or of greater capacity than they were at the time of their installation or acquisition. Of the changes incident to betterments the cost of such portion only as will, when added to the original cost of the property bettered, give the cost of reconstruction in present condition or property as bettered, should be charged as plant and equipment investment. The remainder

of the cost of the changes should be classed as a repair and be charged to the appropriate expense accounts.

Replacements.—Replacements are those installations of plant and equipment which have for their purpose the substitution of one building, structure, piece of equipment, or machine for another which it has become necessary to retire, the substitute having substantially no greater capacity than the plant or equipment replaced. The cost of the plant and equipment retired should be removed from the accounts in which it is carried, and the cost of the plant and equipment installed in place of that so retired should be charged to the appropriate fixed investment account.

FACTORS IN CONTROL OF CAPITAL EXPENDITURES.—In determining the policy of controlling fixed capital expenditures consideration must, therefore, be given to:

1. The character of expenditures to be considered as **repairs** and those to be classified as **replacements.**
2. The definition of what constitutes a **betterment** as distinguished from a **replacement.**
3. The adoption of methods to insure that any plant retired from service by abandonment or replacement, will be promptly removed from the fixed capital accounts.
4. The **amount of depreciation** to be charged off annually.
5. The **standard of efficiency in operating plant** required by the type of operations performed based on the competitive standard of the industry.

Budgetary Control of Fixed Capital Expenditures

IMPORTANCE OF BUDGETARY CONTROL.—The best means of acquiring control over construction expenditures is to require a definite budget based on a most comprehensive estimate of costs and complete analysis of the proposition. The only time to obtain a control over construction expenditures is before they are made. Too much care cannot be given to the working out of a proposition to make added fixed investment. It should be complete, accurate and final. The estimate should cover all expenditures required, both direct and indirect. Such appropriations should have the approval of the operating department and the accounting, financial and executive heads of the business.

Before authorizing fixed capital expenditures, the executives must satisfy themselves on the following points, as summarized by McKinsey and Meech in "Controlling the Finances of a Business":

1. Is the present plant and equipment being used as effectively as possible?
2. What will the new capacity cost and will the probable additional return justify the outlay?
3. For what purpose is the new plant needed, i.e., is the new one for manufacturing capacity, for storage space, or for office space?
4. Is the new capacity to be used for the production of more units of the product already manufactured, or for the manufacture of new products?
5. Is the new capacity to be used in furthering a policy of integration? Is the company reaching backward to control the sources of raw material, or forward to control the agencies of distribution? Is the

company pursuing a policy of horizontal expansion, i.e., buying our competitors?

6. Can the necessary capital be raised? Can it be raised economically?
7. Should the business raise more capital than it needs to construct and equip the new plant? How much more, if any?

Or stated more briefly, the executives must have sufficient information to determine:

1. Why the expenditures should be made now.
2. Why the expenditures should be made at all.
3. Why the expenditures should be made in the manner recommended.
4. What, if any, effects the expenditures will have on the revenues and expenses.
5. Whether it is practicable to finance the expenditures.

Need for an Established Procedure and Control.—In order to decide these questions intelligently, it is necessary for the company to have an established procedure for compiling the data from the departments and sources best able to furnish them, so that the various factors may be made available to the executives. A means must be provided of controlling the expenditures so that they may be kept **within the limits originally authorized** and the **financial requirements** anticipated and provided for.

Industrial Corporation vs. Public Utility.—In providing methods and forms for controlling fixed capital expenditures, a distinction must be recognized between the requirements of the ordinary industrial corporation and of a public utility, such as a telephone or electric light and power company. In the case of most industrial corporations the distribution of the products realized from the operation of the fixed capital is not confined to the immediate territory in which the fixed capital is located. On the other hand, the revenue-producing capacity of the fixed capital of a public utility is to a large degree, limited to the territory in which the plant is constructed. In other words, the location of the fixed assets of an industrial is not subject to the exact limitations of the available market for its products that obtains for a public utility.

Another important difference between an industrial and a public utility that must be considered in authorizing fixed capital expenditures is the element of **public regulation of the rates** that may be collected for service rendered by a public utility thereby limiting the revenue-producing capacity of the plant regardless of its cost or the demand.

These two factors must be taken into consideration by a public utility for fixed capital expenditures in each unit or division of its territory, whereas an industrial ordinarily has only to consider the total demand of its entire territory and the competitive market for its total product in determining the amount and type of equipment it requires.

SUPERVISION OF CAPITAL EXPENDITURES.—A system **suitable to the needs of an average industrial corporation** is described in the following taken from "Controlling the Finances of a Business," by McKinsey and Meech. It will serve to illustrate the principles involved and may be adapted, with minor changes, to the individual needs of any company, either industrial or public utility.

Plant and Equipment Control.—To exercise effective control over disbursements for plant and equipment, three things are necessary:

1. There must be available data which will show **results of past operations** and serve as the basis of future plans.

2. After all the available data have been considered, the plans which have been formulated must be expressed in workable form by means of a **budget on plant and equipment. Sometimes two budgets** are made, one on **maintenance costs** and one on the **cost of betterments and additions.** The requirements for each are sufficiently similar to discuss jointly.

3. After the budget is made, it is necessary to have records and reports prepared which will permit the **control of such expenditures** and the enforcement of the budget plans.

Data Required as Basis of Control.—The data required to serve as a basis for control and equipment expenditures may be classified as follows:

1. Those obtained from the **accounting and statistical records** with reference to past experience.
2. Those obtained by **a mathematical calculation** based on predetermined factors.
3. Those determined by a **consideration of future plans.**
4. Those obtained as a result of **investigation and study** by experts.

Accounting and Statistical Data.—To make plans which will control expenditures for plant and equipment, a proper classification of the plant and equipment must be made and proper records to reflect this classification must be maintained. This classification is needed in order to make an accurate estimate of plant and equipment expenditures.

To illustrate, in a manufacturing business the plant and equipment expenditures will vary with the production program. If production is to be increased it will be necessary to do one or both of two things: (1) secure additional equipment; (2) use present equipment more intensively. In either case, additional expenditures will be incurred, and to estimate accurately the amount of these expenditures the various kinds of equipment used in production must be carefully considered.

If **additional equipment** is to be secured, it will be necessary to determine the units of equipment used in the past and the amount of production obtained from this equipment. On this basis the additional equipment required to secure the increased production capacity can be estimated. A record of each unit of equipment is necessary in order that the past production capacity may be determined accurately.

If the **present equipment is to be used more intensively,** the maintenance cost will be increased. An estimate of this increase must be made. A change in the production program will not affect all the equipment of the business to the same extent. For example, it may be planned to increase the output of one department, while the output of the remaining departments is to remain unchanged. This increase in the output of one department is liable to increase the maintenance expense of this department, so that if the previous expense is shown separately from that of the other departments a more accurate estimate of the increase can be made. It will be necessary, however, to know more than the total maintenance cost of the department. The new program will probably affect some units of equipment in the department more than it will others. It is desirable, therefore, to have records which will show each unit of equipment in the department, and the maintenance expense incurred on it. This is accomplished by keeping a **plant ledger** containing an account with each unit of plant and equipment.

Data from Predetermined Factors.—All equipment wears out in time and its replacement must be provided for. This provision is accomplished by charging a certain amount to the expenses of each budget period, and crediting a

like amount to a **reserve for depreciation.** The amount of such depreciation is an important element of the expense of operation and must be included in the plant and equipment budget. In the calculation of the depreciation charge, three things are considered: the original cost of the asset, its anticipated life, and its estimated scrap value. By subtracting the scrap value of the asset from its original cost, it is possible to determine the cost of the use of the asset during its period of life. This cost must be distributed over the period of its life in such a way that each budget period will be charged with its equitable share.

Effect of the Budget Program.—The accounting and statistical records show the past expenditures for plant and equipment, but a change in the volume of production will affect both the maintenance charges and the charges for additions and betterments. It is necessary, therefore, to consider the effect of the budget program on each of these.

There are many plans which may affect **cost of maintenance.** If an increase in production is planned, the increased cost of maintenance arising therefrom must be estimated. If new methods of manufacture are to be employed, the consequent change in maintenance cost must be calculated. If new equipment is to take the place of old, the maintenance cost will be affected. If it is planned to inaugurate a policy of keeping the equipment in better repair so as to make it more efficient and to prolong its life, this change must be considered. These as well as other factors affect the cost of maintenance, and all must be considered.

In the same manner in which the general plans of the business, as reflected in the departmental estimates, affect the cost of maintenance, they determine the amount of new equipment to be purchased. In a manufacturing business the amount of equipment required is determined primarily by the volume of production. If records are available which show machine capacity it is not difficult to estimate the requirements of the increased production in terms of number of machines or units of equipment. If proper records are maintained, it is possible to estimate the total requirements of the production program and the total production capacity of the factory. By a comparison the excess of requirements over capacity can be determined, and from this the new equipment required can be calculated.

Investigation and Study by Experts.—A periodical check should be made on the accuracy of the valuation of the plant and equipment as shown by the records. If a plant ledger is maintained, it is possible to obtain the original cost, the **accrued depreciation,** and **the repairs** incurred on each unit of plant and equipment. The depreciation shown as accrued is only an estimate, however, and the expenses which have been incurred may have been more or less than those required to maintain the equipment in an efficient condition. Unless some steps are taken to determine the accuracy of the estimated depreciation and the sufficiency of the repairs which have been made, it may later be found that both the depreciation and the repairs have been inadequate, with a consequent unduly heavy charge against the earnings of future years.

To avoid this a **periodical inventory or appraisal** should be made of plant and equipment and used both as a means of checking the plant ledger and as a basis for budgetary plans. By this means inaccuracies in depreciation estimates and inadequate repairs can be discovered and corrected. It is also possible that too liberal depreciation may have been allowed or that too extensive repairs have been made. Such appraisals will serve to disclose this. They will also show when it is better to purchase a new machine than to repair an old one.

Although an appraisal of plant and equipment is valuable when used in this way, it must be employed with discretion, especially if made by professional appraisers. The viewpoint of the professional appraiser is not necessarily that of the financial executive. The appraiser tries to determine the present value of the article he is appraising. He is concerned with its original cost and past use, only as they assist him in determining present value. As a consequence, market fluctuations are apt to be reflected in his appraisal. The financial executive, on the other hand, is not interested in the market value of the equipment. He is interested only in apportioning the original cost and the cost of repairs over the periods which will benefit from its use, in as equitable a manner as possible. An increase or decrease in the market value of the asset does not increase or decrease its life or efficiency. For these reasons, although the appraiser's valuation may not agree with the book value, the book record may still be satisfactory. The main importance of the appraisal is not the valuation which it places on the asset, but rather the appraiser's estimate of the length of life and efficiency of the asset as reflected in the valuation.

Contents of the Plant and Equipment Budget.—The plant and equipment budget can be arranged to show any facts which the executives consider desirable for their use. It is usually thought desirable that it contain the following:

1. The **value of present equipment** at beginning of period.
2. The **estimated depreciation and repairs** on present equipment.
3. The **estimated cost of new equipment** which should show:
   (a) Cost of factory equipment, and
   (b) Cost of equipment for administrative and selling units of the business.
4. **Estimated depreciation and repairs** on new equipment.
5. **Total depreciation and total repairs** on both old and new equipment.
6. **Value of total equipment** at end of period.

Preparation of Plant and Equipment Budget.—The executive in charge of production is responsible for the preparation of the plant and equipment budget so far as it relates to the factory. This responsibility he will delegate to the **plant engineer,** who in turn will employ the assistance of the works maintenance department and the works engineering department. In calculating the depreciation charges he will avail himself of the services of the accounting department as well. The cost records will also be of service in estimating the cost of repairs and construction of new equipment. The purchasing department will assist in estimating the cost of new equipment which it is planned to purchase.

In estimating the amount of equipment required, it is necessary to make use of the estimate of production, since the quantity of production will affect the equipment requirements. If a plant engineer is not employed, the plant and equipment budget may be prepared by the staff of the production manager or by the planning department. The cost of repairs and depreciation will be estimated by the cost accounting department in the estimate of manufacturing expense, and this estimate may be used in preparing the estimate of plant and equipment, but it is preferable that a separate estimate be prepared by some unit of the production department.

The office manager is responsible for the preparation of the estimate of **equipment for the administrative and selling units.** In its preparation he will employ the assistance of the heads of the departments and executive units. Each of these will submit a request to the office manager for the equipment which he desires during the next budget period. The office manager will

consolidate these into one estimate and will transmit it with his recommendations to the executive in charge of the budgetary procedure.

The production manager will transmit the estimate of manufacturing plant and equipment to the executive in charge of the budgetary procedure, and the latter will transmit it, together with the estimate of the office manager, to the budget committee. After the committee has approved these estimates, they will be returned to the production manager and the office manager respectively.

Report on Appropriations.—To exercise effective control over the plant and equipment budget, it is necessary to have periodical reports which will permit a comparison between the amount appropriated for each class of expenditures and the amount actually expended. A report should be made monthly, giving this comparison. This report should provide the information shown in Fig. 1.

A report made in this form is of service not only to the executive exercising control over the purchases and construction of plant and equipment, but also to the financial executive. It shows the former the amount which he has available for future construction, and the latter the amount which he must plan to finance. The 10th column gives the treasurer information of especial value, since it states the **payments which must be made in the near future.** The 13th column shows the amount which may be diverted to some other purpose in case of financial stringency. If the budget committee receives this report each month, it can exercise an effective control over all disbursements for plant and equipment.

Reserve for Contingent Expenditures.—It is usually not possible to estimate exactly each item of plant and equipment cost which must be met during the budget period. There will be need for **expenditures which cannot be foreseen.** These additional costs should be anticipated and included in the plant and equipment budget of each period. Since these additional costs vary in amount from period to period, it is well to **credit a reserve account** for the amount provided for them in each budget. When the costs are incurred, they can be charged against the reserve. These additional costs may be due to rising costs of material and equipment, labor emergencies, accidents, increased production, and similar causes.

By employing the method outlined above, these costs can be taken care of when they arise. This reserve obviously has a limited use and must not be made a means of hiding excessive amounts paid for construction or repairs during certain periods. If it is too large, it interferes with the control for which the plant and equipment budget is intended.

Executive Organization for Control of Fixed Capital Expenditures

PROCEDURE FOR COMPILING DATA.—In order that the entire organization may be properly co-ordinated in the work of compiling data for fixed capital expenditures, as discussed in the foregoing sections, a corporation should provide definite rules of procedure to be followed in authorizing and controlling such expenditures:

1. To insure proper consideration and thought on the part of the various officials in authorizing the expenditure of funds for such purposes.
2. To insure a proper record of such expenditures to the end that at all times the true capital assets of the corporation will be correctly reflected on its books.

MONTHLY REPORT ON APPROPRIATIONS FOR PLANT AND EQUIPMENT

MONTH OF.....192...

NAME OF APPROPRIATION	No.	Period	Per Cent of Completion	Original Amount	Additions	Deductions	Final Amount	Cash Disbursed	Accounts Payable	Undisbursed Balance	Contracts for Labor & Supplies	Balance Available for Future Contracts
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

FIG. 1. Monthly Report on Appropriations for Plant and Equipment

COMMITTEE ON RULES OF CAPITAL EXPENDITURES.—In some corporations, the **executive committee,** and in others an **appropriations committee,** is designated by the board of directors to supervise the preparation and application of the rules governing fixed capital expenditures.

The **duties** of such a committee may be defined as follows:

1. General **charge of all appropriation matters** and consultant in all matters pertaining to the preparation, authorization and handling of appropriations, including the necessary organization incident thereto.
2. **Verify actual performances** as compared with forecasts in cases where appropriations are authorized on basis of estimated saving.
3. **Determine the full scope of all projects** and present a statement of the entire commitment to which company may be subjected by authorization of such projects.
4. **Advise finance and executive committees** as to status of uncompleted projects and present forecasts of the funds required to meet expenditures under authorized projects.

DEFINITION OF TERMS.—A **"project"** or **"estimate"** is a particular or definite piece of construction or development work and is so designated in order to:

1. Keep control of such construction work and expenditures incident thereto.
2. Insure proper authorizations on the part of supervising executives.

A **"program"** covers a summary of all related projects or estimates involved in the completion of a particular construction development and provides the appropriations committee with definite information as to the total amount of funds required. The program is of especial importance to the board of directors in preparing the budget for the year and arranging for adequate financing.

CLASSIFICATION OF PROJECTS.—Estimates or projects may be divided into two classes, **specific** and **routine,** depending on the nature of the work and the amount of the expenditure involved.

Specific projects are required for each job where—

1. The estimated aggregate gross expenditure for construction or renewal of fixed assets is in excess of a minimum amount specified by the appropriations or executive committee. Ordinarily the minimum amount should be $1,000, but the conditions peculiar to each business will indicate variations from this amount.
2. Fixed assets having a first cost in excess of such minimum amount are to be sold or otherwise retired.
3. Fixed assets are to be purchased for a gross consideration in excess of the minimum amount specified.
4. The estimated aggregate gross expenditure for unusual or extraordinary repairs or for improvements in the nature of deferred assets is in excess of the specified minimum.

Routine projects provide a means of formally authorizing and subsequently reviewing the total estimated expenditures for a given period involving additions or retirements of fixed assets, purchases and sales and transfers of machinery and equipment between departments, where the total expenditure on an individual job is less than the minimum fixed for specific projects. Routine projects may be prepared to cover expenditures for one year or for each quarter, although in unusual cases where the construction activities of the company are abnormal, it may be desirable to have routine estimates prepared monthly.

SCOPE OF SPECIFIC PROJECTS.—Ordinarily each specific project should embrace all expenditures that are required to accomplish some specific purpose in the department or division originating the expenditures. Similar expenditures in another department should be covered by a separate specific project. A general increase in the capacity of a plant as a whole might involve changes or additions in a number of departments or types of equipment, and in such a case a single specific project may be designated. If such a project requires a long time to complete, it may be desirable to designate more than one specific project to cover it, in which case each specific project affecting the improvement should include a reference to the other specific projects involved, and each should show the total estimated expenditures involved for all the specific projects included in the job.

COST OF SPECIFIC PROJECTS.—The estimated cost of specific projects should be checked with the actual expenditures during the period of construction. If it is found that the actual cost is liable to exceed the estimated cost by an established maximum of 10% to 15%, as may be determined by the appropriations committee, an explanation of the overrun should be prepared and a **supplementary appropriation** requested as soon as the overrun is discovered. Similarly, it may be desirable to have underruns explained so that the appropriations committee may avoid unnecessary financing expenses.

Estimated expenditures involved in connection with work included in a specific project which will be **chargeable to ordinary current expenses** should be shown on the specific project as a notation, but should not be included in the fixed capital expenditures to be authorized under this project.

CLASSIFICATION OF SPECIFIC PROJECTS.—Specific projects should be classified between "Cleared Monthly" and "Construction Work in Progress" on the following basis: **"Cleared monthly" projects** should cover expenditures for additions to fixed capital which can be completed and made ready for use as a whole, or in large parts, within two months of commencement. **"Construction work in progress"** estimates should be prepared for construction or improvement of fixed capital assets of major importance, unless the work is such that it can be completed and made ready for use as a whole or in large parts within two months from commencement. "Construction work in progress" projects should include an allowance for interest charged during construction.

A **number** should be assigned to each specific project and this number should be used at all times when referring to the project.

AUTHORIZATIONS FOR SPECIFIC PROJECTS.—**Responsibility for originating and preparing data** for specific projects depends somewhat on the size and policy of the corporation. Ordinarily specific projects involving only one department will be prepared by that department with the technical or engineering department acting in an advisory capacity. Specific projects involving more than one department or large units of property will normally be prepared under the supervision of one or more of the general executive officers, in order to insure the most comprehensive development possible for the corporation as a whole.

After a specific project has been fully prepared, it should normally pass through the lines of organization for approval of the proper supervisory officials before being submitted to the appropriations committee or the board of directors. A general **outline of the approvals** required and the scope of such approvals is as follows:

1. **Departmental or divisional executives** originate and approve projects up to $25,000 and involving only the division in which originated.

2. **Operating vice-president** approves specific projects originated by the division executives and originates and approves specific projects amounting to more than $25,000 or involving more than one division of the corporation.

3. **President or general manager** reviews and approves specific projects transmitted to him by the operating vice-president and turns them over to secretary of the appropriations committee for submittal to that committee for final approval.

REGISTER OF AUTHORIZED SPECIFIC PROJECTS.—A register of authorized specific projects should be maintained by the secretary of the appropriations committee to show the following information:

1. Estimate number
2. Location
3. Character of work
4. Estimated expenditures
5. Date of authorization by appropriations committee
6. Actual expenditures
7. Date of completion

The information for the last two items will be obtainable after completion of the estimate from the monthly progress report as discussed later.

FORM FOR SPECIFIC PROJECT.—A typical form in preparing a **specific project** is shown in Fig. 2. Each item on the form is numbered and is briefly explained as follows:

The name of the division or department, the location of the project and the project number are shown as item 1, 2 and 3 respectively.

The title of the project is shown as item 4. The title should be as short and comprehensive as possible, but once chosen should be adhered to as long as the particular project is under development.

Under item 5 should be shown whether the project is to be **cleared monthly or carried in Construction Work in Progress** with resulting charges for interest during construction.

The **estimated cost of the project** is provided under item 6, divided between gross expenditures for fixed capital, interest during construction, if any, cost of removal, extraordinary repairs, less salvage and net expenditures. The latter should be the amount authorized by the appropriations committee, and should agree with the total of the accounting classification of net expenditures as shown in item 13.

Items 7 and 8 call for a **justification of the project** from the commercial standpoint, or in other words, why the project is necessary or advisable, and a brief technical description of the project. The following points should be considered and specifically covered, if applicable:

If the project involves an **increase in general capacity,** state advisability as well as necessity for the increase.

If for making products now obtained elsewhere, state the reasons for the proposed change.

If for the extension of a department producing products for one or more other departments, state the departments to be supplied and the necessity of this development as compared with purchasing such products outside the company.

If the project is **of new production character,** state fully the necessities for it.

If the project is **of a hazardous or uncertain nature,** give details as to risks involved and the justification for incurring such risks.

A **record of the past and estimated future performance** of the division or department should be furnished under item 9. This information may not be available to the department but should be compiled by the executive best

qualified to do so, from accounting records and estimates of future business. This information will be of particular value to the executives and appropriations committee in determining the merits of the project.

Item 10, Return on Capital Employed on this Project, is co-ordinated with item 9 and should be prepared in connection therewith.

Item 11, Construction Progress Data, and item 12, Disbursement Data by Months, should show the **estimated progress of the construction and the cash disbursements** by months, and will enable the appropriations committee to make proper provision for the cash requirements without incurring unnecessary expense due to idle funds. This information will also afford a check on the actual progress of the work as shown on the monthly progress report (Fig. 3).

Item 13, Accounting Classification of Estimated Net Expenditures on Project, calls for a classification of the net expenditures in detail with account titles and numbers, the total of which should reconcile with item 6.

Item 14, Construction Data, should cover a summary record of any maps, layouts, drawings or descriptions of the technical development of the project. Where lists of machinery and detailed estimates are submitted, they should be prepared on letter size paper and incorporated as part of the specific project as additional exhibits.

Under item 15 include any general remarks that may be helpful in determining the requirements or needs which justify the project.

Item 16 requires the necessary authorizations and approvals of the project by the officials involved, such authorizations to be by personal signatures.

Items 17 and 18 provide for an **approval or rejection of the project** by the appropriations committee and a statement of their findings based on the information contained in the project or on independent investigations together with their reason for approving, modifying or rejecting the project.

COSTS AND RECORDS.—**Preliminary expense** incidental to the formation of plans and specifications in connection with projects before the necessary approvals have been secured should be **charged to a suspense account** and cleared to the specific project as soon as authorized. If authorization is not obtained, such preliminary expense should be charged off to current operating expense. All **expenditures on approved specific projects** should be charged against the particular specific project by number so that upon completion the total cost will have been accumulated and may be compared with the estimated cost as reflected by the specific project authorization. If the construction work is not done by the company's own organization, the **contractor doing the work** should be required to maintain his records in such form that necessary cost data may be secured from his records for completion of the company records.

RECORD OF EXPENDITURES BY SPECIFIC PROJECTS.—The accounting department of the company should maintain a separate record of each specific project, carrying details of the charges by months and by amounts, so that a complete record of each specific project may be available in the company files as supporting data to charges and credits in the plant accounts. A typical form for such a record is shown in Fig. 3. In large companies it may be necessary to summarize the actual charges by sources, such as vouchers, journal entries, material disbursements, etc., on a separate form and post only the totals to this record. In such cases, the detail sheets should be preserved as supporting data to the summary form.

At the close of each month, reports should be prepared as soon as practicable by the department in charge of the project, showing the status of the work of

(Name of Company)

SPECIFIC PROJECT

DATE.....

1. NAME OF DIVISION OR DEPARTMENT	2. LOCATION OF PROJECT	3. PROJECT NO.

4. TITLE OF PROJECT	5. CLEARED MONTHLY OR CONSTRUCTION WORK IN PROGRESS

6. ESTIMATED COST OF PROJECT — Estimated Amount

Fixed capital.....
Interest during construction (unless cleared monthly).....
Cost of removal of old plant.....
Extraordinary repairs.....
Total gross fixed capital expenditures.....
Less, salvage.....
Net fixed capital expenditures.....
Book value of old plant displaced.....

7. NEED OF PROJECT FROM COMMERCIAL STANDPOINT

8. TECHNICAL DESCRIPTION OF PROJECT

9. PAST AND ESTIMATED FUTURE PERFORMANCES

Invested Capital		Net Sales	Net Profits	Per Cent Return on	
Date	Amount			Net Sales	Invested Capital
1922					
1923					
1924					
1925*					
1926*					

(*) Estimated

10. RETURN ON CAPITAL EMPLOYED IN THIS PROJECT

Fixed Capital Employed	Working Capital	Total Capital Employed	Estimated Saving on Return	% Return on Capital Invested

11. CONSTRUCTION PROGRESS DATA

	Date
(a) Construction starts	
(b) 25% completed	
(c) 50% completed	
(d) 75% completed	
(e) Final completion date	

12. DISBURSEMENT DATA BY MONTHS

Month	Amount

FIG. 2. Form of Register for Specific Projects

13. Accounting Classification of Estimated Net Expenditure on Project

Account Title	Account No.	Estimated Cost	
		Amount	Total
Land			
Land improvements			
Leaseholds			
Buildings (Detailed by sub-accounts as required)			
Machinery (Detailed by sub-accounts as required)			
Mcs.			
Grand total			

14. Construction Data

15. Remarks

16. Authorizations

This will certify that the above, in my judgment, is a correct analysis of the proposed expenditure and the Project, as submitted, is recommended in the best interests of the Company.

Prepared by: ..... (Date) Authorized by: ..... (Date)

Authorized by: ..... Dept. Head (Date) Approved by: ..... Operating Vice-Pres. (Date)

Approved by: ..... President or General Manager (Date)

17. Certification by Appropriations Committee

This will certify that all factors involved in this Project have been examined and the Project is hereby (approved) for reasons stated under Item 18.
(modified)
(rejected)

..... Chairman

18. Recommendations

Fig. 2. (Continued)

each specific project which is uncompleted. This report should show such information as the following for each specific project.

1. If material has not been ordered, the date order will be placed.
2. If material has been ordered, the approximate date of delivery.
3. If material has been received, the approximate percentage installed.
4. Amount by which total costs will exceed appropriation, if any, and the reasons for the increase.
5. If estimated completion date will not be met, the approximate date of completion and reasons for delay.

All reports should be forwarded through the accounting department for the insertion of the following information:

1. Amount of appropriation
2. Amount of expenditures to date
3. Amount of appropriations unused
4. Estimated cost to complete
5. Estimated overrun or underrun

SUMMARY OF MONTHLY PROGRESS REPORT.—After the above data has been compiled, a form, known as the **monthly progress report summary,** should be prepared. This should show the monetary amounts noted above for each specific project. This summary, with the individual reports attached, should be forwarded through the general manager to the appropriations committee for consideration and such action as may seem desirable. Additional copies of the monthly progress report summary may be distributed to such executives as are interested. (See Fig. 3.)

CLOSING OF SPECIFIC PROJECTS.—After all work on a project is physically completed, any outstanding accounts should be settled as promptly as possible, the proper distribution of charges made and the project closed out. After a project has been closed, no further charges should be made against it. The monthly report covering the month during which a project is closed should show the final status of the project with a note indicating its closure during the month and thereafter it should not appear on the monthly report.

ROUTINE PROJECTS.—As defined on page 622, routine projects provide a means of authorizing the total estimated fixed capital expenditures for a given period to be fixed by the appropriations committee when the total expenditure on an individual job is less than the minimum fixed for specific projects. Such projects may be prepared for the company as a whole, but in large companies it will probably be desirable to prepare a **separate routine project for each division or department.** Routine projects should be prepared on January 1 to cover the quarterly (or other) period, and new routine projects prepared for each like period thereafter. Each routine project should be closed at the expiration of the period for which it is prepared whether or not there is an unexpended balance, and the subsequent new project should be prepared in time to continue the authorization.

Routine projects should in all cases be prepared by the division or departments to which they may apply and be forwarded for authorization and approval, in ample time, to be returned to the division or department before the effective date of the routine project. The data for preparing routine projects should be based on:

1. Records for previous periods.
2. Present plans for expansion and development.

(Name of Company)

Date of Project	Date Approved	Commenced	Completed	Description of Work	Location	Specific Project No.

Cleared Monthly or Construction Work in Progress

Appropriation		Land	Buildings	Machy. & Equip.	Drawings & Patterns	Tools	Office F. & F.	Reserve for Depreciation	Total
Month	Posting Reference								
Total									
Total									
Cumulative	Total								
Total									
Cumulative	Total								
Total									
Cumulative	Total								

Fig. 3. Form of Monthly Progress Reports

(Name of Company)
ROUTINE PROJECT

DATE.....

1. NAME OF DIVISION OR DEPARTMENT	2. LOCATION	3. PROJECT NO.

4. PERIOD COVERED

5. COMPARISON OF ESTIMATED EXPENDITURES WITH PREVIOUS PERIODS

	Estimated for this period	Actual for same period last year	Actual for previous period
Fixed capital.....			
Cost of removal of old plant.....			
Extraordinary repairs.....			
Total gross expenditures.....			
Less salvage.....			
Net expenditures.....			
Book value old plant displaced.....			

6. EXPLANATION OF VARIATIONS

7. CLASSIFICATION OF ESTIMATED NET EXPENDITURES

Acct. No.	Account Title	Estimated	
		Amount	Total
	Land (Sub-accounts as required) Buildings (Sub-accounts as required) Machinery and Equipment (Sub-accounts as required) Etc.		
	Grand Total.....		

8. REMARKS

9. Authorization

Prepared by:..... (Date) Approved by:..... Operating Vice-Pres. (Date)

Authorized by:..... Dept. Head (Date) Approved by:..... President or General Manager (Date)

Approved by Appropriations Committee } ..... Secretary (Date)

FIG. 4. Typical Form of Report of Routine Project

3. Estimated cost of construction contemplated that will not be covered by specific projects.

FORM FOR ROUTINE PROJECT.—A typical form for use in preparing periodic routine projects is shown in Fig. 4. A brief description of the information required is as follows:

Items 1, 2 and 3 provide for the name of the division or department, location and project number.

Item 4 states the period covered.

Item 5 provides a comparison of estimated expenditures for the period with actual expenditures for the previous period and for the same period last year.

Any unusual variation between the estimated and the actual for the periods compared in item 5 should be explained in item 6.

Item 7 provides for the accounting classification of estimated net expenditures by main and sub-accounts and should agree in total with the total net expenditures under item 5.

Item 8 provides space for remarks and item 9 for the proper authorizations and approvals.

EXPENDITURES UNDER A ROUTINE PROJECT.—Expenditures under a routine project should be authorized by the department or division head on **a job order form** showing:

1. The number of the job order. Job orders should be numbered consecutively for each routine project.
2. The number of the routine project.
3. The character of the work to be done.
4. The estimated gross and net expenditure involved.
5. The location of the work.

All expenditures under job orders should be charged directly to fixed capital or other accounts involved, with a reference to the number of the routine project involved so that the total expenditures under a routine project may be summarized by the accounting department. Adequate supervision should be given to the use of job orders to insure that:

1. No job order is authorized for estimated net expenditures that exceed the minimum amount required for a specific project.
2. That two job orders are not issued for a particular piece of work in order to bring the estimated net expenditures on each job order below the required maximum for job orders.

ACCOUNTING RECORDS.—Forms may be provided for summarizing expenditures under routine projects similar to those for expenditures under specific projects. Such data when summarized should be posted to the general ledger by accounts and to such detail records of plant and equipment as may be required by the company involved.

SECTION 9

PURCHASING

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SECTION 9

PURCHASING

THE PURCHASING AGENT.—Since expenditures for materials and supplies may constitute from one-third to three-fourths of the disbursements of a manufacturing or trading concern, the **purchasing agent** has a very direct working relation to the financial manager. The results of the business operations may be affected to a marked degree, favorably or unfavorably, by the efficiency of the purchasing agent or by his failure to live up to his opportunities for good service.

The purchasing department should save enough to more than cover the expense of its maintenance. It should, in fact, by reducing costs, save even more than the total of its operating expenses. These possible savings are sometimes overlooked by managers who may consider this department merely as the office through which to place the purchase orders.

Through his contacts with manufacturers and producers and his knowledge of general market conditions, the purchasing agent often finds opportunities for procuring material **at lower prices** at one time than he would have to pay at another, or for purchasing the same kind of article more cheaply from one producer than from another. He may suggest to the engineering or operating departments the **substitution of materials** or **changes in specifications,** to permit the use of substitute materials which will answer the purpose and be less expensive, because of their being available in larger quantities or procurable at points nearer the consumer.

By reason of the wide field for saving in the purchasing department, the financial manager should be keenly interested in its organization, methods and routine, in order that he may determine whether or not it is operating to the best advantage.

Qualifications of the Purchasing Agent

KNOWLEDGE OF COMMODITY MARKETS.—The purchasing agent should know his market, have a true perspective of the relation between buyer and seller and have a general knowledge of commodities and their values. He must have a highly developed buying sense and be able to sift the wheat from the chaff when salesmen explain the merits of their respective products. He must be a keen student of market conditions and be able to judge market trends. This involves ability to read and understand daily newspaper reports, particularly respecting the commodities with which he is concerned, and to judge correctly the proper time to make purchases.

KNOWLEDGE OF TRANSPORTATION.—He should be familiar with general, as well as local, transportation conditions of the factories with which he is connected. This includes a knowledge of **freight rates** on commodities, and

seasonal demands on transportation systems. It does not mean that the purchasing agent must be a traffic manager or a specialist on transportation, but he must understand that problems exist and he must know to whom to go for help if he encounters a condition which he cannot control or of which he is not fully informed.

KNOWLEDGE OF BUSINESS ORGANIZATION.—The purchasing agent should understand the value of a well co-ordinated organization. He should mix in a friendly way with the shop and factory officials so that he may keep in touch with their day-to-day needs. Thus, when the requisitions from these men come before him, he is in a position to visualize the conditions that prompted them, and he can thereby carry out more intelligently whatever purchasing policy may have been established.

FOLLOWING UP DELIVERIES IN ACCORDANCE WITH PURCHASE ORDERS.—The purchasing agent must follow up the deliveries in accordance with production requirements. It is one thing to make contracts and specify deliveries, and another to see that deliveries are actually made as called for. Since many producers do not use to advantage, or are lacking, systems for planning their own production, they may not make deliveries in accordance with the contracts, unless they are followed up closely.

KNOWLEDGE OF CAPACITY OF VENDORS TO FILL ORDERS.—Knowledge of the vendor's factory and equipment is much to be desired. Purchasing agents who do their work in accordance with modern methods frequently **visit at least the larger suppliers** of their commodities. They make tours of the plants, talk with the managers of production departments in those plants, and visualize the conditions under which the commodities which they require are produced.

If the purchasing agent has knowledge of the shop operations of the vendors, he may be able to arrange to purchase needed commodities a little ahead of time and thus not only aid his own concern but assist industry in general by helping to keep the plant of the vendor busy. In a case of this kind, he may justly argue with the vendor that the price ought to be lower, because if the purchasing agent had not ordered at such a time the production of the plant would be curtailed and its profits decreased.

KNOWLEDGE OF COMMODITIES AND THEIR VALUES.—The more a purchasing agent knows about merchandise the better, because it enables him to discuss intelligently the contracts for his more important commodities, and if he is informed generally as to sources of products and cost of production, he is in a position to decide whether or not a price quoted should be accepted.

He should know something of the **standards used for various classes of products,** as, for example, bolts, nuts, screws, nails, boxes, and the like. These articles, in modern times, are put up in standard sizes and classes, and the purchasing agent should see to it that the engineering specifications are prepared with these standards in mind. If not, he will be obliged constantly to procure special sizes of goods, which in turn may mean higher prices and slow deliveries.

He should be familiar with the work going on in the governmental department of the **Bureau of Standards,** so that he may get first-hand information as to standards adopted. He should then endeavor to fit in the requirements of his own concern with the standards and recommendations from this governmental department.

It is this general knowledge of the commodity situation which will enable a

good purchasing agent to **substitute materials** when market conditions become abnormal and prices are increasing.

Duties of Purchasing Agent

PURCHASE REQUISITIONS.—A purchase requisition originates in the production department in the case of materials for production, and in the engineering department for machinery, tools or other equipment. Requisitions may be submitted by other departments if purchases for such departments must be made in accordance with their special requirements.

The purchase requisition, when it reaches the purchasing department, should have the approval of some major executive and the signature of the departmental buyer requiring the goods. It should contain all data in order that the purchasing agent may buy, such as identity of goods by name or description, quantity needed, or maximum and minimum quantity (allowing the purchasing department to use its own judgment as to the quantity to be purchased), and it should state the date the goods are needed.

The purchasing department should have **statistical data** available providing general information as to vendors from whom it is possible to purchase the commodity, the last price, delivery possibilities, transportation conditions, etc. He should also have other statistical data, such as daily market reports, special reports on particular commodities, information of production possibilities and plant capacities of some of the chief vendors with whom he does business and upon whom he is most dependent. Wherever possible, he should have **two or more firms quote** on the commodity to be purchased. This is generally conceded to be good practice, even though the purchasing agent may be limited at the outset to one particular vendor.

THE PURCHASE ORDER.—The purchase order must show the quantity desired, the proper specifications, describing the article so that it will be understood by the vendor, and give the terms of delivery, payment and discount. The purchasing agent must then supervise the routine follow-up work necessary in connection with all purchase contracts.

RECEIVING THE GOODS.—He should have general supervision over the receiving of all goods when they enter the plant. The **receiving department** is sometimes considered to be a part of the production department, because it is the production department which is concerned primarily with the receipt of goods. Other enterprises consider that the receiving department should function under the purchasing department. Whatever the internal organization of a particular enterprise may be, the purchasing agent should have general supervision of the receiving department.

APPROVAL OF INVOICES.—When the purchasing agent is satisfied that all the terms of the contract have been met, that goods have been received and billed properly, he should approve the invoice for payment and pass it on to the **accounting department.** He is responsible for any **corrections of the purchase invoice** that may be required, because of shortage in quantities, failure to meet contract requirements, imperfections in the merchandise or the like.

DEPARTMENTALIZING BUYING ACTIVITIES.—Where the operations are large enough to require it, the buying activities should be departmentalized; that is, buyers should be used who are **experts in the different commodities,** one buyer making all contracts for one class of merchandise and another taking

care of a certain other line. In merchandising concerns, because of the nature of the business, departmentalized buying is used very generally.

Policies of Purchasing Department

CO-ORDINATING PURCHASES WITH PRODUCTION REQUIREMENTS.—The purchasing department should keep in close touch with the other departments of the business, particularly the production department, so that hasty buying may be avoided. The great bulk of all purchase originates in the production department because that department handles the materials and supplies used in manufacture. It is this department that foresees and anticipates any additional equipment requirements, so that it is particularly important that it work in close harmony with the purchasing department.

Written instructions may be prepared in some cases covering the establishment of **maximum quantities,** how many months in advance the production department plans for, and how much time the purchasing department will be allowed in making purchases. The purchasing agent should have this policy in mind as he scans the market situation daily and notes that a certain commodity may be purchased at that time in a specific quantity for a definite price. He may thus anticipate the production department's needs, if that department has not ordered certain materials for some time, and he knows that two weeks' supply is the maximum carried and that more will probably be needed in a short time.

PURCHASING DEPARTMENT'S AUTHORITY FOR LARGE CONTRACTS.—In establishing the general purchasing policy the authority vested in the purchasing department in connection with large contracts for the major commodities of the concern should be defined. A foundry, for example, may make a contract for a year's time for its supply of coke, pig iron or sand. While the purchasing agent should always be consulted in arranging for these contracts, he may not have the final authority to place them in the case of major items. The policy laid down should clearly define where his authority begins and where it ends.

GOOD PURCHASING DEMANDS GOOD ORGANIZATION.—It should be remembered that good purchasing is largely a matter of **smooth running routine** and the purchasing agent should not allow himself to be engrossed with this routine. He should have it under his supervision, but to give the concern his best thought and experience he should not be burdened with too much detail. Successful purchasing demands a smooth running organization to do the routine work, and this, in turn, means proper personnel and organization within the purchasing department. The purchasing agent who insists that he see and sign every outgoing purchase order, regardless of the materials and size of the order, does not fit in modern organized industry.

ADVICE OF OTHER DEPARTMENTS.—The extent to which other department heads in the organization may interview salesmen should be determined. It may be very necessary where specific technical knowledge is required in the buying of particular commodities. For example, the purchasing agent should not buy a piece of machinery or equipment without bringing the salesman into contact with the chief engineer or master mechanic of the concern. The same policy should cover the various commodities required by each department.

It may be well to prepare a chart of some kind on which will appear the name

of those to be consulted in connection with each class of goods purchased. However, the purchasing agent should be the **final authority** when it comes to placing a purchase order or contract. Other executives called into conferences should act purely as advisers and should have no authority to make purchase contracts.

RELATION OF PURCHASING DEPARTMENT TO OTHER DEPARTMENTS.—The purchasing department is **essentially a service organization,** and as such has a direct relation to every major department of the concern. The purchasing agent in some cases is responsible to the general manager, in other instances to the works manager, and sometimes to the director of production. His authority should be equivalent to that of **one of the major executives** of the business. He should work in close co-operation with all the executives of the enterprise, both office and factory, and should familiarize himself with their needs and their problems. His worth to the business as a whole will be measured by his ability to co-ordinate and co-operate with the other department heads.

The purchasing department should be required to do only the buying and receiving of material and supplies and the checking of invoices. Deciding the quantities of various articles needed, providing properly for their storage, and maintaining records of materials and supplies on hand, are all matters outside its province. The function of purchasing in any concern is of sufficient importance to be handled separately.

Purchasing Department Organization

Modern organization demands that purchasing be **concentrated in one department** under a competent and responsible head, well qualified for his position both by training and experience.

ORGANIZATION WHERE BRANCH PLANTS EXIST.—Where branches exist at widely separated points, the local purchasing should be co-ordinated with the purchasing at the central division. Various plans are possible with this kind of an organization. In some cases copies of all branch orders are sent to the central division. All **large buying contracts** should be made only upon the authority of the central purchasing department.

The branch purchasing departments, except for minor differences due to local conditions, must conform to the general policy laid down by the central organization. The best plan is usually to make all branch purchasing agents subordinate in authority to the central purchasing authority. The central purchasing agent will thus be responsible for all buying, although he may authorize the various branch agents to purchase certain articles for their local needs.

PURCHASING PROCEDURE.—The logical procedure in connection with purchasing should be substantially as follows:

1. The discovery of the need of the material.
2. The writing of the purchase requisition.
3. The checking of these requisitions with standard specifications from the engineering department.
4. Getting quotations on the commodities involved.
5. The formal typing of the purchase order and placing of the order.
6. The follow-up routine necessary to effect the delivery in accordance with scheduled date.
7. The receipt, recording, and checking of the invoice from the vendor.

8. The record in connection with the receipt of the shipment and the checking of the shipment against invoices.
9. The approval of the invoice for payment and sending it to the accounting department.

Usually, the purchasing department begins its work with checking of requisition—item (3) above—since the actions involved in items (1) and (2) are prepared by the production division. Madison Cartmell in his book "Stores and Materials Control," sets forth the detailed activities in connection with a purchase order in relation to the personnel and purchase organization. This is pictured in the chart in Fig. 1. taken from his book.

PLANNING DIVISION.—Purchase requisitions originate at different sources, depending upon whether they represent materials for regular production, for equipment or miscellaneous departmental supplies. Regardless of that origin, **requisitions must be checked** by the planning division of the purchasing department with the material specifications on file. The planning division must determine whether the request represents **standard material,** which is available in the market, or **special material.** In this division should be statistical data regarding standard material, records of specifications, and blue-prints from the engineering department. The division may have charge of **scheduling deliveries** of the materials bought on contract.

The division should make a study of the standardization of materials, the possibility of making substitution of materials then standard against special parts used on current specifications. It should also study such matters as the possibility of replacing goods then manufactured by the concern, with goods bought outside, when the purchase price is lower than manufacturing cost.

It is the planning division of the purchasing department which should concern itself with specifications in general, with the goal in mind of continually **reducing the cost of manufacturing** whether by substitution of materials that are standard for special items, or by the procurement from outside vendors of articles now fabricated within the organization. This division acts as a sort of **staff division** to the entire purchasing department.

QUOTATIONS DIVISION.—The chief function of this division is the **preparation and execution of the formal purchase contract or purchase order** to be sent to the vendor. In doing so, it takes care of the preparatory work, such as securing quotations, maintaining catalog files of vendors, and establishment of statistical card records of each commodity previously purchased. It should have charge of **interviews with all salesmen,** except those who are negotiating the more important contracts direct with the purchasing agent or his assistant.

SCHEDULING DIVISION.—The scheduling division should advise the quotation division as to the proper **routing and scheduling of the shipments** before the order is placed. After the purchase order has been placed with the vendor, this department should be responsible for the **follow-up,** insuring that delivery is made as specified. It is probably the best one to handle the statistical data regarding vendors, such as plant capacities, production statistics, and general reliability records.

INVOICE DIVISION.—This division should retain the purchasing department's copy of all outgoing purchase orders, recording thereon the articles received, as stated on the material receiving reports issued by the receiving department. These reports should also be checked with copy of the purchase order. Claims against the vendors, except those for transportation, should be handled by this division. It should be responsible for the entire routine of check-

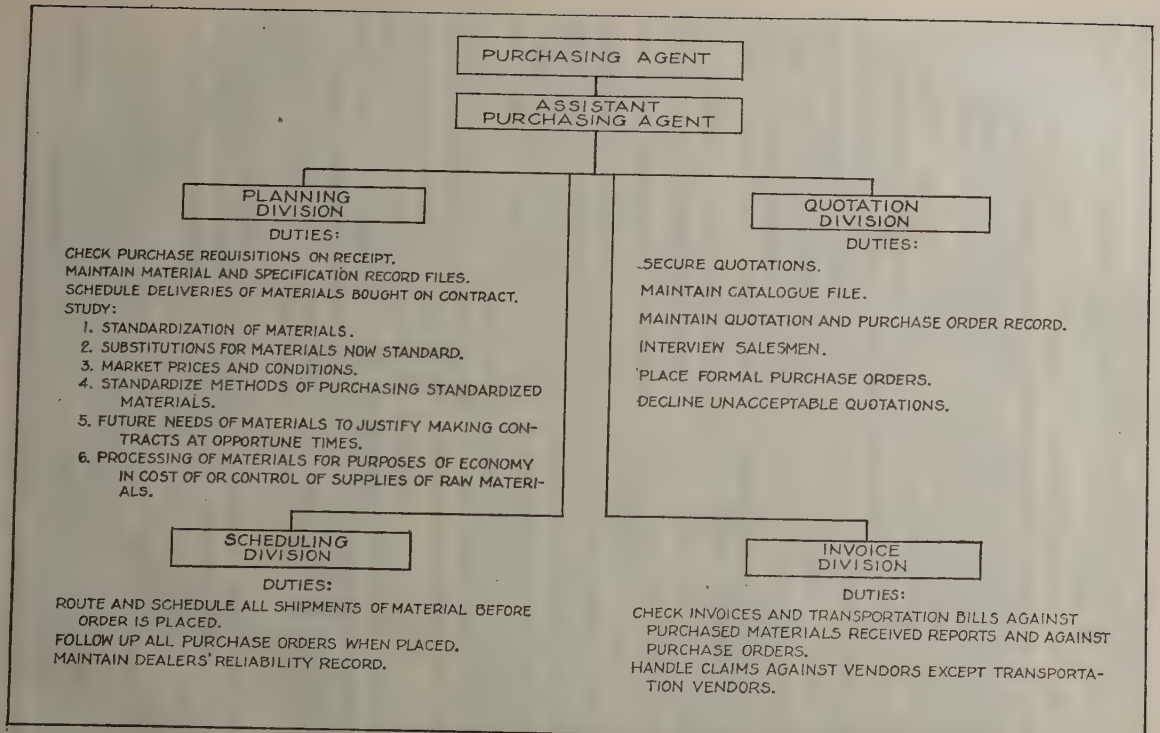

PURCHASING AGENT
ASSISTANT PURCHASING AGENT
PLANNING DIVISION
DUTIES:
CHECK PURCHASE REQUISITIONS ON RECEIPT.
MAINTAIN MATERIAL AND SPECIFICATION RECORD FILES.
SCHEDULE DELIVERIES OF MATERIALS BOUGHT ON CONTRACT.
STUDY:
1. STANDARDIZATION OF MATERIALS.
2. SUBSTITUTIONS FOR MATERIALS NOW STANDARD.
3. MARKET PRICES AND CONDITIONS.
4. STANDARDIZE METHODS OF PURCHASING STANDARDIZED MATERIALS.
5. FUTURE NEEDS OF MATERIALS TO JUSTIFY MAKING CONTRACTS AT OPPORTUNE TIMES.
6. PROCESSING OF MATERIALS FOR PURPOSES OF ECONOMY IN COST OF OR CONTROL OF SUPPLIES OF RAW MATERIALS.
QUOTATION DIVISION
DUTIES:
SECURE QUOTATIONS.
MAINTAIN CATALOGUE FILE.
MAINTAIN QUOTATION AND PURCHASE ORDER RECORD.
INTERVIEW SALESMEN.
PLACE FORMAL PURCHASE ORDERS.
DECLINE UNACCEPTABLE QUOTATIONS.
SCHEDULING DIVISION
DUTIES:
ROUTE AND SCHEDULE ALL SHIPMENTS OF MATERIAL BEFORE ORDER IS PLACED.
FOLLOW UP ALL PURCHASE ORDERS WHEN PLACED.
MAINTAIN DEALERS' RELIABILITY RECORD.
INVOICE DIVISION
DUTIES:
CHECK INVOICES AND TRANSPORTATION BILLS AGAINST PURCHASED MATERIALS RECEIVED REPORTS AND AGAINST PURCHASE ORDERS.
HANDLE CLAIMS AGAINST VENDORS EXCEPT TRANSPORTATION VENDORS.

FIG. 1. Chart Showing Purchasing Department Organization

ing, comparing and recording from the receipt of the material to the final approval for payment of the vendor's invoice.

Prices, Quotations and Terms

DETERMINATION OF BEST PRICE.—In determining the best price available, the purchasing agent must consider all factors such as selling terms, cash discount and delivery terms.

SCRUTINIZING BIDS.—All incoming bids should be compared with previous prices from the same firm and with each other. Bids may vary widely and hence it is important to ascertain whether all bidders are bidding upon identical specifications and will be able to produce the exact article desired. A particularly low bid should always call for considerable scrutiny, not only to determine the basis at which it was made but to ascertain the standing of the firm and its ability to fulfil contracts.

IMPORTANCE OF GETTING BIDS.—Special conditions may govern prices to a considerable extent. A manufacturer may be specially equipped to do a certain kind of work. In his desire for business he may quote a price, leaving out profit entirely, in order to get established in that field. If no bids were asked for, this manufacturer's proposition may never be brought to the attention of the purchasing agent. It is always well to send for quotations from two or more vendors whenever time allows it. The purchasing agent should not get the reputation, however, of sending out requests for quotations and then never placing an order. Once a vendor gets the impression that he is being used merely as a price fixer for one of his competitors, he will refuse to pay any attention to the request for bids or, what is worse, he may give the purchasing agent misleading information.

PRICE FILE.—Whether or not quotations are asked for the purchase requisition should be compared with the price file maintained in the purchasing department showing the purchase prices over a period of time. When bids are solicited, the replies should be entered on **suitable records.** They should be tabulated in detail so that a comparison may be made of the vendors' prices, terms, shipping points, etc. Sometimes the prices will be the same except as to the cost of shipping, which may prove to be the determining factor.

REQUESTING BIDS.—Requests for bids should state clearly delivery date, quantity, specification of material desired, and any other conditions which the purchasing department may impose. (See Figs. 2 and 3.)

KINDS OF PRICE.—There are **four bases** on which prices may be fixed:

1. A definite price basis on a lot or unit.
2. Price based on performance.
3. Current price at time of delivery with or without definite limit.
4. Price composed of the cost, plus percentage for profit.

DEFINITE PRICE PER UNIT OR LOT.—The definite price is probably the most usual and generally the most satisfactory because of its simplicity. Each party knows exactly what it should deliver or receive under the contract, and there should be no room for disagreement. When the price is a **unit price,** the purchaser pays only for such units as he accepts after inspecting the material, provided the contract allows for this inspection. When the price is **for a stated lot,** the purchaser must pay a lump sum for the whole lot, regardless of the inspection of that lot.

THE BUYING COMPANY
NEW YORK, N.Y.
PURCHASING DEPARTMENT

REQUEST FOR QUOTATION
NO. _____

THIS IS NOT AN ORDER

TO _____ 192__

Please quote us your lowest price for shipment to arrive New York, N.Y. by _____ for articles described below, using the attached duplicate for your reply.
Your reply should be in our office by _____

SPEC. NO.	QUANTITY AND KIND REQUIRED	UNIT AND DESCRIPTION	LIST PRICE PER UNIT	TRADE DISCOUNTS	NET* PRICE PER UNIT	DELY IN DAYS FROM REC'T OF ORDER

TO RECEIVE CONSIDERATION, YOUR BID MUST STATE WHEN DELIVERY CAN BE MADE.

Shipping Point _____ F.O.B. New York, N.Y.
Suggested Route _____ *Subject to terms _____

If you are unable to furnish same in accordance with our specifications, quantities, etc., or wish to offer substitutes, please give full details, sending samples of substitutes, if possible.

A purchase order accepting your quotation will be covered by the following conditions:

1. All packages must be marked with our purchase order number and contain an itemized list of contents.
2. Invoices and shipping receipts must bear the order number and must be mailed on the day of shipment.
3. Each shipment must be covered by a separate invoice. Articles on one order must not be billed with those on other orders.
4. The right is reserved to cancel any order if not filled within the contract time.
5. The conditions of order shall not be modified by any verbal understanding or agreement.
6. Charges for boxing and carting will not be allowed unless previously arranged.
7. The acceptance of our order includes all terms, prices, delivery, specifications and conditions stated therein.

THE BUYING COMPANY

Please reply on and return copy 2 of this form as soon as possible.

FIG. 2. Purchasing Agent's Request for Quotation (copy 1)

TO PURCHASING DEPARTMENT
THE BUYING COMPANY
NEW YORK, N.Y.

REQUEST FOR QUOTATION
No _____

FROM _____

_____ 192__

In accordance with your request, we offer you the articles described below at our lowest price for delivery to arrive New York, N.Y. by _____. Our quotation is subject to the conditions stated on copy 1 of this form.

Our reply should be in your office by _____

SPEC NO	QUANTITY REQUIRED	UNIT AND DESCRIPTION	LIST PRICE PER UNIT	TRADE DISCOUNTS	NET* PRICE PER UNIT	DEL'Y IN DAYS FROM RECT. OF ORDER
		WE CAN MAKE DELIVERY AS ABOVE STATED.				

Shipping Point _____ F. O B. New York, N.Y.
Suggested Route _____ *Subject to terms _____

We are unable to furnish the above as described and offer substitutes as follows.

_____ Shipper

Date _____ 192__ Per _____

Reply on and forward this copy to The Buying Co. as soon as possible.

FIG. 3. Purchasing Agent's Request for Quotation (copy 2)

PRICE ON PERFORMANCE.—Prices based on performance have caused many disputes and much trouble. Automobile tires guaranteed for mileage are but one example of difficulties in prices of this kind. Where the use of an article cannot be controlled, it is a bad policy to buy on the basis of performance, as it invariably leads to disagreements.

CURRENT PRICES.—This method of price establishment provides for the purchasing on the basis of the current price at the time of delivery of goods. In contracts of this kind the arrangement usually calls for agreement on the average daily price of the commodity quoted in trade papers. Unless the purchasing agent has a very good knowledge of market conditions and knows the extent of fluctuation which may be expected during the specified period, the policy of buying under a current price provision is not wise. Another disadvantage of this type of buying is the uncertainty it creates in the future financing of the business. The financial manager will not know just what to provide for in his finances unless he can gauge future markets.

THE COST-PLUS CONTRACTS.—During the World War the government secured a large part of the goods needed for war purposes on the "cost-plus contract" basis. Under such a contract, the seller agrees to do a certain piece of special work for the buyer in return for which he is to receive his actual cost plus a certain per cent as his commission or profit. There are many variations possible under this plan, such as the setting up of a maximum cost, latest delivery date, a premium for exceptional speed of delivery, etc.

Whenever there is an unsettled market or there exist unknown conditions of manufacture in which the seller is reluctant to carry the full risk because of the unusual nature of manufacture, this arrangement may be preferable to a fixed price contract.

EFFECT OF DELIVERY COSTS.—Wherever possible, the purchasing agent should stipulate that the shipment be made f. o. b. destination, (1) to decrease the cost of material; (2) in order that the vendor be made responsible for all negotiations with the transportation company, including claims for damage; and (3) that formal delivery may not be made until the day the material is received at destination, thus allowing ample opportunity for inspection before payment is due. The prevailing custom is to make all shipments f. o. b. shipping point, but where the purchasing agent can change this, it is to his advantage.

CASH DISCOUNTS.—Another important feature of establishing the net price is the consideration that must be given to discount for prompt cash payment. Cash discounts are treated from the accounting viewpoint as financial gains and are not deducted from material costs. They should, however, be given attention by the purchasing agent before arriving at the final price at which he will purchase the article. Contrary to general belief and practice, the credit period allowed for payment begins upon the day of delivery wherever and whenever that may be. If the material is quoted f. o. b. shipping point, 30 days net, the bill is due 30 days from the day of shipment. If quoted f. o. b. destination, the bill is due 30 days from arrival. While this is in accordance with the terms of the contract, the common practice is not to pay invoices until goods are actually received. It is a very unusual case where the goods are not received within the time limit.

TERMS IN ACCORDANCE WITH CREDIT RATINGS.—The purchasing agent must familiarize himself in general with trade conditions, and he may expect to be asked from time to time to furnish credit information. Where the purchase of an article is desired which is of importance to production and the article is only procurable at one source, the purchaser may be called upon

to furnish a **statement of his financial standing.** Wherever possible, he should anticipate such requests and furnish information in advance with his order so as not to delay delivery to the production department. Some concerns do not accept the ordinary trade ratings of Dun's or Bradstreet's and the purchasing agent should be sufficiently familiar with buying conditions to anticipate their wishes.

TRADE ACCEPTANCES IN PURCHASING.—The purchasing agent should familiarize himself with the method of payment for invoices known as the trade acceptance, which in the last few years has come into more general use in the American market. While it is usually not the purchasing agent's concern as to how bills are paid, the seller may specify his form of payment and the purchasing agent should familiarize himself with that method. Trade acceptances are discussed in the Section on Banking Relations.

The Contract

KINDS OF PURCHASE CONTRACTS.—The purchase contract **should be in writing** so as to avoid misunderstandings commonly arising out of oral arrangements. The **two generally recognized forms of purchase contracts** are (1) a **single purchase order contract** covering a particular purchase and originating from a purchase requisition, and (2) a **blanket contract** usually covering a large quantity of raw materials or supplies for which no definite delivery dates are scheduled, or if scheduled, extending over a long period of time and more or less subject to special conditions arising from time to time.

A blanket contract is placed with a vendor only after a careful survey of all the data available and final approval by the manager. The other form of contract, namely, the single purchase order, originates only from the purchasing agent and usually does not need the approval of the manager, except in so far as it is a part of the general policy of the company. In either form of contract, however, the same principles operate in the matter of price and the same general buying practice must be kept in mind.

THE BLANKET CONTRACT.—The blanket contract usually takes one of **two forms**—one stating a definite quantity of merchandise to be delivered in specified amounts, per week, per month, etc., or to be delivered at the discretion of the purchasing department. The other form of contract calls for delivery of definite amounts per week or per month without stating the total quantity that will be required. This latter form of contract may specify a **maximum requirement** as well as a **minimum,** with the actual requirements running somewhere between these two for the long period of time; or it may provide for a termination clause requiring sufficient advance notice on either side to terminate the contract. Sufficient notice may mean 3, 4 or 5 months, depending upon the commodity and conditions.

The terms of blanket contracts are practically always very definite as to price but seldom include more definite stipulations regarding shipment and delivery dates than the clause that shipments are to be "approximately so many units per month." These blanket contracts frequently cover a variety of materials, instead of one commodity.

THE INDIVIDUAL PURCHASE ORDER.—A single purchase contract growing out of a purchase requisition on which bids were obtained is the usual purchase order form with which most readers are familiar. This type of purchase order can also be used to give the delivery and shipping directions for the periodic shipments required on a blanket purchase contract.

(COPY 1)

THE BUYING COMPANY

This number must appear on all invoices and packages
№ 35353

NEW YORK, N.Y. 192

ORIGINATOR OF REQUEST FOR MATERIAL

TO

REQUISITION NO.

PLEASE FURNISH US WITH THE FOLLOWING MATERIAL IN ACCORDANCE WITH YOUR QUOTATION OF

STORES SYMBOL AND LOCATION	QUANTITY	UNIT AND DESCRIPTION OF MATERIAL WANTED	LIST PRICE AND TRADE DISCOUNTS
		Return Acceptance Card Promptly, giving Complete Shipping Information.	

TERMS F.O.B.

SHIP VIA TO ARRIVE NEW YORK, N.Y. ON

1. All packages must be marked with the order number given above.
2. Invoices and shipping receipts must bear this order number. Mail them on day of shipment.
3. Each shipment must be covered by a separate invoice. Articles on this order must not be billed with those on other orders.
4. The right is reserved to cancel this order if not filled within the contract time.
5. The conditions stated in this order shall not be modified by any verbal understanding or agreement.
6. Charges for boxing and carting will not be allowed unless previously arranged.
7. If price is not stated on this order, the material must not be billed at a higher price than last paid without notifying us in advance.
8. The acceptance of this order includes all terms, prices, delivery, specifications, and conditions stated herein.

THE BUYING COMPANY

PURCHASING AGENT

FIG. 4. Purchase Order (copy 1)

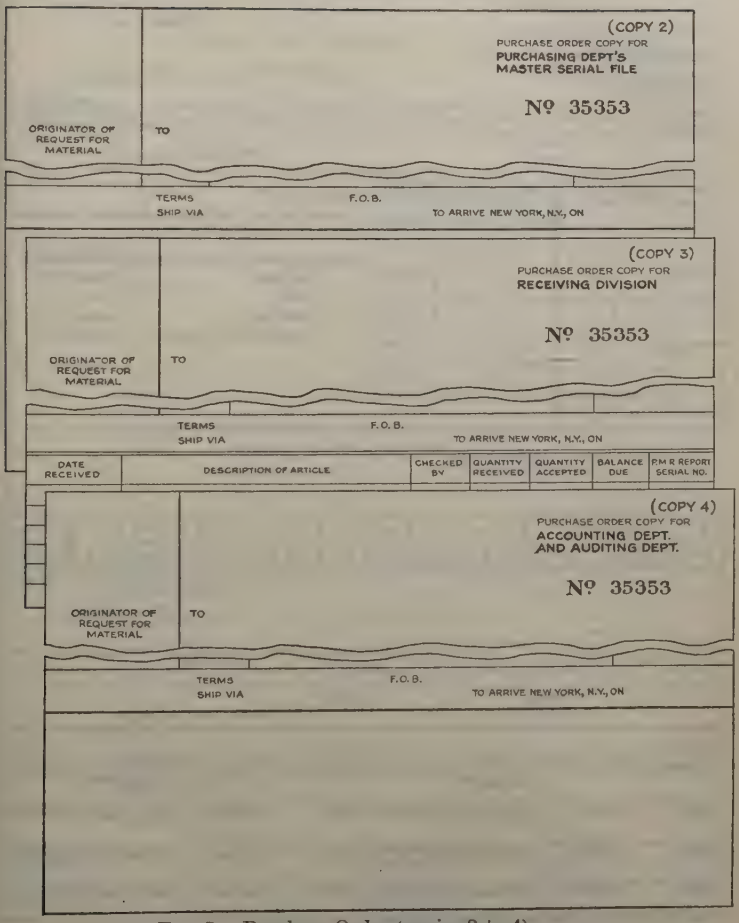


FIG. 5. Purchase Order (copies 2 to 4)
In copy 3, column "List Price and Trade Discounts" is eliminated.

(COPY 5)
PURCHASE ORDER COPY FOR
ORIGINATOR

THIS COPY FOR
ORIGINATOR OF REQUEST FOR MATERIAL

TO

192 **Nº 35353**

TERMS
SHIP VIA

F.O.B.
TO ARRIVE NEW YORK, N.Y., ON

DATE	QUANTITY RECEIVED	BALANCE DUE	DATE	QUANTITY RECEIVED	BALANCE DUE

To Originator:
Should you desire information about this order, please call the Purchasing Dept. as follows:

About Specifications, change of order - Call Planning Division
Quotations — Preparation "
Dealer — Production "
Delivery date — Scheduling "
Inspection, Claims, Invoices — Inspection "

FIG. 6. Purchase Order (copy 5)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	M

PURCHASING DEPARTMENT'S (COPY 6)
FOLLOW-UP FILE

Nº 35353

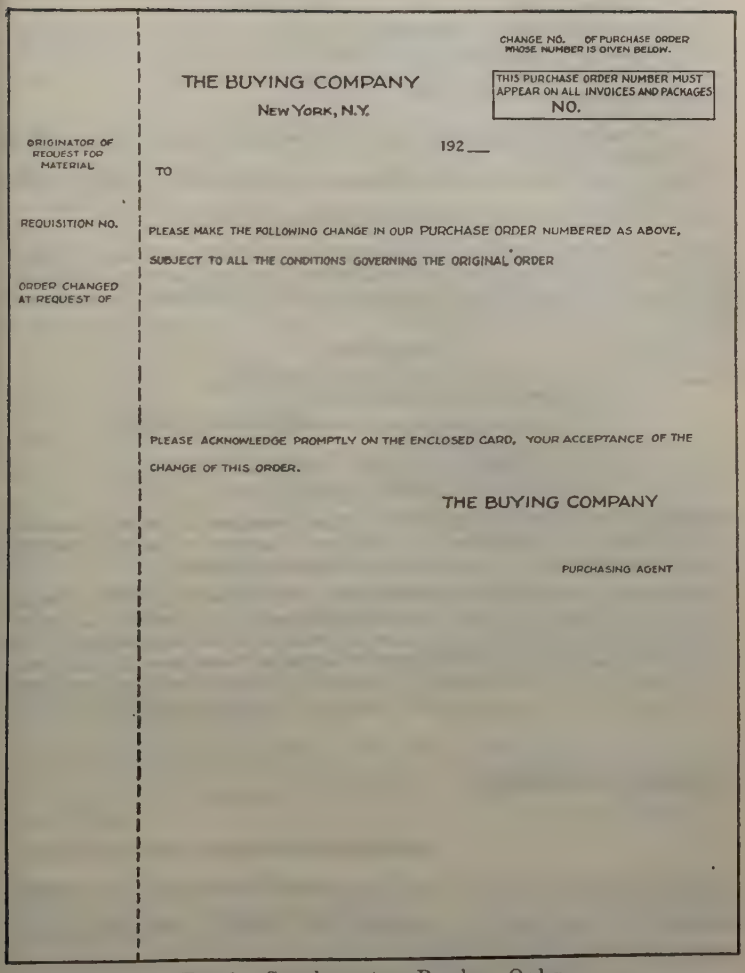
TERMS
SHIP VIA

F.O.B.
TO ARRIVE NEW YORK, N.Y., ON

ITEM				ITEM			
Acknowledged	Promised	Notice of Shipment Invoice Bill of Lading } Rec'd.	Invoice Number	Acknowledged	Promised	Notice of Shipment Invoice Bill of Lading } Rec'd.	Invoice Number
Urged	Promised	Part of Complete } Order	Invoice Amount	Urged	Promised	Part of Complete } Order	Invoice Amount
Urged	Promised	Date Mat'l. Rec'd.	Copy of Material Received Sheet	Urged	Promised	Date Mat'l. Rec'd.	Copy of Material Received Sheet
Urged	Promised	Mat'l. Accepted	Balance Due On Order	Urged	Promised	Mat'l. Accepted	Balance Due On Order

FIG. 7. Purchase Order (copy 6)

Copy 6 is on card stock. Reverse side of this copy is a continuation of the items shown below on this form; also at top of reverse side numbers are given in reverse order, reading from right to left.


CHANGE NO. OF PURCHASE ORDER WHOSE NUMBER IS GIVEN BELOW.

THE BUYING COMPANY
NEW YORK, N.Y.

THIS PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES AND PACKAGES
NO.

ORIGINATOR OF REQUEST FOR MATERIAL

192___

TO

REQUISITION NO.

PLEASE MAKE THE FOLLOWING CHANGE IN OUR PURCHASE ORDER NUMBERED AS ABOVE,

SUBJECT TO ALL THE CONDITIONS GOVERNING THE ORIGINAL ORDER

ORDER CHANGED AT REQUEST OF

PLEASE ACKNOWLEDGE PROMPTLY ON THE ENCLOSED CARD, YOUR ACCEPTANCE OF THE CHANGE OF THIS ORDER.

THE BUYING COMPANY

PURCHASING AGENT

FIG. 8. Supplementary Purchase Order

Six copies. Five copies similar to first, except that recipient of copy is stated at top as in Fig. 4. Sixth copy is identical with first copy, but in addition contains numbers at top and data at bottom, as on Fig. 7.

Every purchase order should include the following:

1. Name of the vendor to whom the order is given.
2. A description of the goods desired.
3. The quantity and units of goods wanted.
4. The price to be paid, including terms of payment, etc.
5. When delivery is to be made.
6. Shipping directions.
7. Any special identification marks for packages, such as the purchase order number.
8. Any special conditions or references not written out in detail in the order.
9. The signature of the purchaser representing the company.

A **formal purchase order** is sent to the vendor for his acceptance. This is the purchase contract between buyer and seller. As many as six copies of this order (Figs. 4, 5, 6 and 7) may be made out to serve different purposes and functions, as follows:

Number	Destination
1	For vendor (this is the contract proper).
2	For purchasing department's file.
3	For receiving department to identify goods on arrival.
4	For accounting division.
5	For originator of requisition for checking purposes.
6	For purchasing department follow-up file.

CHANGES IN ORIGINAL ORDER.—If any changes, either in quantities, articles or terms, are desired by the purchaser, it is usual to furnish a **supplementary purchase order,** a form for which is shown in Fig. 8.

NECESSITY FOR LEGAL VIEWPOINT.—The every-day relation which the purchasing agent has with the vendors demands that he have a general knowledge of the law applicable to the activities in which he is engaged. He should familiarize himself with the **law of contracts,** being sure that any contract in which he engages contains the essential elements that must be present

DATE _____

THE BUYING COMPANY,
NEW YORK, N. Y.

THIS ACKNOWLEDGES RECEIPT OF YOUR PURCHASE ORDER NO. _____ DATED _____ FOR _____ WHICH WE ACCEPT. SHIPMENT WILL BE MADE ON _____ VIA _____

_____

FIG. 9. Vendor's Acceptance of Order
Private post-card forms, self-addressed to Purchasing Department.

to make a contract valid. These essential elements are discussed in the "Law of Contracts" and "Law of Sales" in the section on Business Law.

ACCEPTANCE OF A CONTRACT.—The acceptance by the vendor of the purchase contract should be made by the same method of communication as was used in the making of the contract, unless the purchaser requests an answer by another method. The usual method is **the acceptance or acknowledgment card** sent with the purchase order itself, which is returned by the vendor. The acceptance is effective and the contract made as soon as the vendor has delivered a prepaid acceptance to the post office department or to any other agency suggested by the purchaser. The contract is complete even though the acceptance may never be received. At any time before acceptance the purchase order can be withdrawn by giving notice to the vendor. (Fig. 9.)

MEANING OF AGREEMENT IN RELATION TO PURCHASE CONTRACT.—Where the purchase order is the outcome of having secured bids, the vendor is in the position of having made an offer and the purchase order is in effect the acceptance of that offer. Certain features which have been described in the purchase contract may be omitted, as the law presumes them, namely, that when nothing is said of the terms, the law implies cash; when nothing is said about delivery, the law implies that the buyer will be entitled to delivery when he pays the price.

VALUE OF HAVING CONTRACTS IN WRITING.—It is always best to have all contracts in writing, to avoid the trouble caused by inability to prove "meeting of the minds." Probably a frequent source of trouble between buyer and seller is the neglect to insert definite dates of shipment or deliveries or prices. Whenever a purchasing agent finds it necessary to make **an oral agreement** involving a future transaction, he should make it a point to have it **confirmed in writing** as soon as possible.

SALE VERSUS CONTRACT TO SELL.—The purchasing agent should make it his business to know whether he is negotiating a sale or a contract to sell. The following definitions are given in the Uniform Sales Act: "A sale of goods is an agreement whereby the seller transfers the property to the buyer for a consideration called the price." "A contract to sell goods is a contract whereby the seller **agrees to transfer** the property and goods to the buyer for a consideration called the price."

In a sale, presumably the delivery takes place at once although the seller may still have possession of the goods and the purchase contract may even state delivery is "f. o. b. destination." This statement regards price rather than the time of delivery.

The Market

GENERAL KNOWLEDGE.—The purchasing agent must know where the article he wishes to buy may be procured. Much of the **market information** is of such a nature that it cannot be tabulated, but a good part of it can be put down in record form, and kept in the statistical files of the purchasing department. This data becomes the stock-in-trade of the purchasing agent.

The purchasing agent may know what he wants, but this alone is not sufficient. He must know what the market offers and how it is offered. Sometimes the sources of supply will be numerous and sometimes they will be few and it will be difficult to get proper delivery. Information of this nature is not accumulated in a short time, but represents years of painstaking effort. It is built up slowly and to be of value must be done carefully.

USE OF STATISTICS.—The purchasing agent must follow the **general trend of economic conditions.** He should use for this purpose the data submitted weekly by **various statistical agencies, financial and trade papers.** He may **compile his own data** on basic commodities which form the bulk of his purchases. A keen student of market conditions may make very substantial savings by timely purchases. If he does not have the authority to initiate these purchases, he will in any event have the opportunity to make suggestions bearing on the making of contracts of this kind. Some concerns are able to maintain their record of **earnings by means of timely purchasing.** A manufacturing enterprise may actually lose money on its manufacturing efforts, but the saving made by good buying may offset this loss and enable the concern to show a profit.

Statistical information is more easily visualized when presented in the form of **graphs.** The purchasing agent may, for example, keep a graph showing the relation existing between finished steel and iron, and the trend of the basic pig iron market. The one should follow the other very closely, and knowing the one, he will be able to anticipate the other. Data of this kind compiled over a long period of time will prove of great value for comparative purposes.

SUPPLY AND DEMAND.—Any marked fluctuation in price should call for an immediate investigation. Prices are an indication of general conditions. The purchasing agent may, for instance, have knowledge of excessive supplies of a certain commodity. With this information he should be able to judge the bids received in the light of his knowledge. If they are not in accord with his judgment, he should look for other causes. In an open competitive market, price changes will usually furnish a key to the conditions governing supply and demand. When the total quantity wanted by buyers is greater than the supply offered by producers, the buyers must raise their bids, until more producers enter the field and thereby increase the available supply. Producers will sometimes leave the market, stating that they cannot afford to produce at the prevailing prices but will return when prices are raised. This **adjustment of supply and demand** is going on continually and should be an object of continuous study by the wide-awake purchasing agent.

WHERE TO BUY.—Information as to possible sources of supply may be procured even when seeking materials in heretofore unknown fields. This information may be obtained from trade directories, lists of jobbers, and the trade papers. Salesmen are usually reservoirs of information as to possible vendors. The purchasing agent should make it his duty to assure himself that satisfactory competition exists with the vendor from whom he is buying so as to avoid putting his "eggs in one basket," and thereby subjecting himself to monopoly prices.

SECTION 10

INSURANCE PROTECTION

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SECTION 10

INSURANCE PROTECTION

Insurance is a system or a plan which distributes the losses of individuals ratably over a large number of participants in the plan.

BASIS OF INSURANCE.—Insurance is based on the premise that losses do not occur simultaneously to all subscribers. Individual losses do not occur in any regular order, but there is some regularity of occurrence when taken collectively. This collective regularity is used as a basis for computing the deposit or premium required from each subscriber.

INSURANCE ORGANIZATIONS.—In order to put into operation effective plans of insurance it is essential that organizations be created for that purpose. Such organizations bring together those desirous of securing the protection afforded by insurance. These organizations are termed **"insurers"** and the individuals employing the protection they offer are the **"insured" or "assured."** Since insurance is recognized as a business necessity, various kinds of organizations have been created, which are discussed in detail.

RELIABILITY OF INSURER.—Investigation of the stability and character of the management of the insurance company is important. While financial executives will closely scrutinize the financial position and management of any individual partnership or corporation to whom credit is extended, there are few executives who even know with which companies they have placed their insurance. While most of the companies doing business are reliable, this fact is no excuse for neglecting ordinary business precautions to ascertain whether such companies with whom insurance is placed are properly conducted and able as well as willing to meet losses when they occur; also, whether settlements made in the past have been made upon an equitable and just basis by these companies.

PRACTICALLY EVERYTHING IS INSURABLE.—Insurance protection may now be obtained for almost every conceivable contingency which may arise in the course of everyday personal or business life.

INSURANCE CONTRACTS ARE FOR INDEMNITY—NOT WAGERING CONTRACTS.—Insurance contracts are fundamentally contracts of indemnity, in which the assured is indemnified in case of loss. Frequently such contracts are loosely referred to as gambling contracts. Although in a sense speculative in that the insurance affords a protection against a hazard which may prove to have been unnecessary, they are in no sense gambling contracts, when undertaken by those having interests to protect. It is simply paying for protection against an existing hazard. From this standpoint insurance is buying protection similar to the purchase of a safe for protection of valuables against loss from fire and theft, which may never occur even without such protection.

For the insurer, insurance contracts cannot be viewed as gambling contracts,

because the premiums on such insurance are worked out on a **system of probabilities and averages.** In true gambling agreements, losses occur only by reason of the existence of the wagering agreements. But where a real risk exists, regardless of whether there is insurance or not and a contract is made among many to bear the risk of one, this cannot be construed as a wagering or a gambling contract.

GROUPING OF INSURANCE PROTECTION.—For the purpose of this section the various kinds of protection procurable by insurance will be grouped into four main headings, viz., **Fire, Life, Marine,** with a general section under the title, **Miscellaneous Insurance.**

Fire Insurance

This section deals with insurance against loss caused directly by fire, as well as loss and damage caused in the course of combating it, and the accidental discharge or leakage of protective equipment where installed.

KINDS OF PROTECTION AVAILABLE.—The various kinds of insurance contracts considered under this section are as follows:

1. Fire insurance—buildings and contents
2. Sprinkler leakage insurance
3. Profits insurance
4. Use and occupancy insurance
5. Rent insurance
6. Leasehold insurance
7. Contingent liability insurance—fire, sprinkler leakage

FIRE INSURANCE ORGANIZATIONS.—Fire insurance organizations may be classified as follows:

1. Stock companies
2. Mutual companies
3. Reciprocals or inter-insurers
4. Lloyds
5. Self-insurance

1. STOCK COMPANIES.—Stock companies are corporations formed in accordance with the laws of the state in which they are incorporated. Such companies are subject to the insurance laws of the various states in which they operate. Fire insurance companies are prepared to insure individuals, corporations and associations against loss of, or damage to, property on land caused by or incident to fire. They are **organized for profit,** are entitled to gains from operations, and also must assume the responsibility for losses when they occur.

A Minimum Capital Required by Law.—The laws of most states require a certain minimum paid-in capital which must be kept unimpaired. Stock companies usually maintain **substantial surpluses** as a further protection for their policy holders.

New York State Insurance Laws Typical.—The New York State Insurance Laws are typical of and similar to those of most states. The requirements of these laws are used as a basis for discussion in this section.

Deposit Required by States.—Most states require a **cash or security deposit** before permitting insurance companies to do business within their jurisdiction. Frequently, however, one state will accept the deposit made in another state as being equivalent to a deposit in its own. The State of New York demands a deposit of $200,000—in bonds, stock or other acceptable securities representing that amount. Nearly all states require a minimum deposit of $200,000.

2. MUTUAL COMPANIES.—Mutual companies are composed of a number of owners combined for the purpose of insuring the risks of the various members. Such companies are usually membership corporations **without capital stock.** Profits, if any, are ascertained at stated periods, and distributed in the form of dividends to the policy holders after setting aside reserves for contingencies at the discretion of the directors.

Liability of Policy Holders of Mutual Companies.—The policy holders of mutual companies are **liable for all losses incurred while they are members.** The original premiums paid by policy holders may or may not be enough to pay the losses. A part of such premiums may be returned to them when the total premiums exceed the losses and reserve requirements, or the members may be called upon to pay additional premiums in case the losses exceed the total initial premiums.

Liability of Policy Holders Limited by Law.—State laws usually limit the additional premiums assessable on policy holders in mutual companies to an amount from **one to ten times the original premium.**

Necessity for Larger Original Premiums.—It has been found advisable for mutual companies to charge higher original premiums, and return the excess charges, if they prove to be more than the requirements of the company, in the form of dividends, rather than to collect lower premiums and then be compelled to call for additional premiums or assessments. In this way the newer members are substantially protected by the contingency reserves and surplus retained from prior excess collections from the older members. This is equitable because the losses are then averaged over a number of years.

Lower Costs in Mutual Companies.—Lower cost of insurance to policy holders of mutual fire insurance companies, in its final analysis is **effected by dividends** which in reality are refunds of premiums. These dividends or refunds may reduce the final cost of insurance to a point lower than is general in any other type of organization because of the following factors:

1. Selection of the highest class of risks.
2. Stringent requirements in regard to protective equipment.
3. Maintenance of internal organizations for prevention, combat and salvage within the individual risks.
4. Economies in management
5. The higher degree of co-operation from individual policy holders in making all of the above factors effective due to the direct interest which they hold.

Profits are not the purpose of mutual organizations.

3. RECIPROCALS OR INTER-INSURERS.—A reciprocal fire insurance organization is an **extension of the mutual form** of fire insurance. A number of firms, corporations and individuals termed subscribers enter into a contract, each agreeing to indemnify the others against losses within a limit agreed upon. For example, assume that 11 subscribers entered into reciprocal contracts with a limit of $1,000 each. Each of the subscribers would thereby acquire additional insurance to the extent of $10,000. The contracts would specify the amount to be deposited by each subscriber, the method of distributing the cost of conducting the business of insurance, the apportionment of the losses and other necessary stipulations. As the main object of this plan is to secure insurance at actual cost, its subscribers are usually composed of merchants or industrialists who have little time to devote to the business of insurance. They, therefore, select an attorney-in-fact, generally designated

the **attorney**, who effects the exchange of contracts, and conducts the business of insurance under the supervision of a committee selected by the subscribers.

Usually the **deposit made by each subscriber** is determined by the rate paid to stock companies for insurance of the same class of work. This deposit remains to the credit of each subscriber. Usually a fixed charge is made to each subscriber's account to pay the expenses of management.

Each account is charged with its pro rata share of losses as they occur, and at the close of the policy period, the amount to the credit of each subscriber is returned to him, except where, as previously agreed upon, a portion of such amount is retained as a reserve against future extraordinary losses.

In the event of the **retirement of one of the subscribers,** the retiring subscriber's policy is cancelled and the amount remaining in his account, after deduction of losses, expenses, etc., to date of his retirement, is returned to him, including any reserves for extraordinary future losses. In a mutual company, any amounts set aside for future contingencies remain with the company.

The success of a reciprocal plan depends largely upon the following:

The moral standard of the subscribers.
The efficiency and honesty of the management.
The selection of preferred risks over a broad area.
The constant and intelligent inspection of risks.
The improvement and maintenance of preventive measures and equipment.

4. LLOYDS ASSOCIATIONS.—Lloyds is an association of individual underwriters, each of whom assumes personal liability for the amount of insurance for which he subscribes. Insurance written by its members is, therefore, effected with individuals instead of with companies. This form of organization originated with the Lloyds of London, which association is one of the strongest of its type. They **accept risks of every class,** and sometimes enter into contracts which are practically gambles, insuring death of notables, the fall of kings, etc. In this country, organizations of this type limit their business to specific lines.

5. SELF-INSURANCE.—Self-insurance is the assumption of the risk by the owner of property who lays aside periodically sums estimated as adequate to provide in time a fund sufficient to reimburse him for any losses which may occur. Where plants are scattered over the country, isolated in most cases, and the class of business, together with the construction of the property, is such that fire hazards are greatly minimized, such insurance may be successfully undertaken by the owner. The chances for the success of a self-insurance plan would be greatly enhanced if during the period of accumulation of the fund, insurance in other organizations be used to supplement the plan, this **supplemental insurance** being gradually reduced as the fund is increased.

Non-Insurance is Not Self-Insurance.—Self-insurance should not be confused with the assumption of risks without any provision for losses when they do occur. Every man who does not insure his property carries this latter so-called "self-insurance," but if he is in business, the interest of his bankers, creditors, customers, and employees must be considered. The **essence of insurance** is the provision for prompt indemnification of losses, and where this principle is not observed insurance cannot be said to exist. Even where reserves are set aside but no actual segregation of promptly convertible assets is made, the principle of insurance is not properly observed. A sound business would require, not merely a bookkeeping entry but also the accumulation of a **fund invested in quickly convertible securities,** kept virtually in trust. Reserve for self-insurance is not an allowable deduction under the present income tax laws.

QUALIFICATIONS NECESSARY IN THE INSURED.—An individual, partnership or corporation desiring to secure insurance protection must have an **insurable interest** in the property at risk. An insurable interest is a direct interest in property which, if destroyed or damaged, will result in a pecuniary loss to the holder of that interest. Neither ownership nor possession is necessary.

The following is a list of instances of insurable interest which occur most frequently:

The interest of an actual owner.
The interest of a representative or agent of the actual owner, such as a custodian, bailee or warehouseman.
The interest of a tenant or lessee.
The interest resulting from a legal liability, such as common carriers or bailees for hire.
The interest of holders of property as security for indebtedness, such as a mortgage.

Insurable Interest in Property Not Confined to One Party.—Each party, having a direct interest in property, has an insurable interest to the extent of the pecuniary loss which he will suffer if the property is destroyed or damaged.

Freedom from Suspicion an Important Factor.—An applicant for insurance should be free from suspicion of ever having been involved in a fire loss in which there was a suspicion of the assistance of human agency in the cause of the fire. Insurance companies frequently refuse to grant insurance when the insured was suspiciously involved. This is referred to by the companies as the **moral hazard.**

METHODS OF OBTAINING INSURANCE PROTECTION.—The method in general use for securing insurance protection from fire is that of requesting an **insurance broker** to cover the risk. Application, however, may be made through one of the company's authorized agents.

INSURANCE BROKERS.—The broker is the **agent of the insured** and not usually of the insurance company. Therefore, the insured is generally responsible for the acts of his broker. Many brokers employ a staff of men to protect the interest of their clients in the following ways:

Securing an adequate amount of insurance.
Securing suitable policies.
Adapting the policies to the need of the insured.
Inspecting property and advising of improvements which would result in lower insurance cost.
Seeing that lower rates are effective promptly where justified.
Seeing that adequate protection is carried at all times.
Seeing that endorsements properly protect the interests of their clients.
Advising the insured in the event of a loss and negotiating a settlement of such loss advantageously for their clients.
Eliminating overlapping coverages.

Important Considerations Regarding Brokers.—Insurance is **not effective** if the broker, as agent of the insured, omits to place the insurance required with an authorized agent of the insurance company or directly with the company. Neither is the insurance company responsible for losses where through neglect of the broker, the contract has not been fulfilled by the payment of the necessary consideration stated in the policy. In other words, if the broker fails to pass the premium on to the company or its agent the contract will not be effective.

Insurance companies allow the broker 30 days to turn in the premium. If he

fails to do so at the end of that period, the company notifies the insured directly that the policy is void.

Qualifications of an Insurance Broker.—In view of the responsibility which the insured places upon the broker and which the broker presumably recognizes, also the scope afforded for economies and the procurement of complete and effective coverage at a minimum cost, it is essential that the broker should have at least the following qualifications, or should employ those possessing them:

Financial soundness.
A knowledge of the insurance laws of the state, or states in which he operates.
A knowledge of the "Law of Contracts."
A technical knowledge of insurance requirements covering the various elements which influence the rates.
An intimate knowledge of the various kinds of coverage available and the scope as well as the limitations of each kind.
An efficient method of recording the various transactions entered into for his clients so that none may be neglected.

Licensing of Insurance Brokers.—While in most states brokers are licensed and are required to pass an examination for the purpose of ascertaining their fitness to act as such, the possibilities of incompetent or irresponsible brokers securing licenses, are many. This control by the state and the co-ordination secured through the various associations of underwriters, all work toward the elimination of incompetent or undesirable brokers, but it will be some time before this aim is fully realized.

THE FIRE INSURANCE CONTRACT OR POLICY.—Most states have adopted by statute a **standard form of fire insurance contract,** similar to the present New York standard form which is used as the basis of discussion hereinafter.

Main Provisions of New York Standard Fire Policy.—For the purpose of this section, only the main provisions of the New York standard form of fire insurance contract will be considered. These are arranged for convenience as follows:

The parties to the contract.
The maximum of liability.
The rate, premium and consideration.
The protection afforded.
The provisions affecting the commencement and termination of the contract.
The provisions for interruption or temporary suspension of the contract.
The provisions for voidance of the contract.
The provisions for settlement of losses.

THE PARTIES TO THE CONTRACT.—The **name of the insurer** (any one of the various types of organizations already described) constitutes a part of the printed section of the contract. The **name of the insured** is inserted in the space provided for it. It is highly essential that the name of the insured be definitely and correctly stated in the policy, on which the expression, "and legal representatives" is printed immediately following the name of the insured. This expression is intended to cover a trustee or administrator legally appointed to manage the affairs of an incompetent person. In the case of a mortgage the policy provides on lines No. 124 and No. 125 as follows: "Other

provisions relating to the interest and obligations of such mortgage may be added hereto by agreement in writing." A mortgage clause is usually added to cover such a case.

THE MAXIMUM AMOUNT OF LIABILITY.—The amount stated on the face of the policy is the maximum liability assumed by the company and does not necessarily fix its actual liability in the event of any particular loss. A more complete discussion of the measure of loss will be found under the provisions for settlement of losses.

RATE, PREMIUM AND CONSIDERATION.—Contracts without seal, under which classification insurance contracts come, require a consideration to make them effective and enforceable. The **consideration** for a fire insurance contract is made up of two elements, viz.:

1. The stipulations specified in the policy.
2. The premium.

The assurances of the insurance company are conditional upon the stipulations in the policy, and wherever the form of policy is prescribed by the laws of the state, the presumption in law is that the insured is acquainted with these stipulations.

The premium is the result of the rate per $100 multiplied by the amount of maximum liability stipulated in the policy. The rate will be considered under a separate heading.

PROTECTION AFFORDED.—To quote the wording used in the policy, the protection is "against all DIRECT LOSS AND DAMAGE BY FIRE, and by removal from premises endangered by fire except as herein provided."

Loss and damage by fire, mentioned above, means all loss or damage directly and naturally resulting from a hostile fire, not deliberately started for the purpose of destroying the property insured. **A hostile fire** is one which accidentally leaves the place of confinement designated for it, as distinguished from a **friendly fire,** which never leaves such a place, as the fire in a stove or lamp. Any damage caused by a friendly fire, such as smoke from a stove or lamp, remaining friendly, is not a liability assumed by the insurer.

FIRE MUST BE THE DIRECT CAUSE OF LOSS.—The fire need not necessarily reach the property. Loss and damage may be caused by smoke from the fire, chemicals or forces released by the fire, provided their presence was not specifically forbidden or excluded and agents such as water used in combating the fire. There must, however, be continuous connection between the event of the fire and the loss or damage, without the interference or introduction of any new or unrelated cause.

REMOVAL OF PROPERTY ENDANGERED BY FIRE.—The policy also provides protection against loss and damage which may be caused by the removal to other locations of property endangered by fire; and further extends the protection to such property in the new locations for a period of 5 days, for the proportionate part of the insurance coverage remaining after deduction of the loss.

Example:

	Value	Insurance Carried
Property at original location before loss	$25,000	$20,000
Less, loss and damage suffered	5,000	5,000
Remaining property value and coverage	$20,000	$15,000

	Value	Insurance Coverage five days
Property removed to location X	$ 5,000	$ 3,750
Property removed to location Y	5,000	3,750
Property remaining at original location	10,000	7,500
	$20,000	$15,000

Both of the above arrangements were intended as incentives to the insured to save and preserve property. If, however, the insured fails to cover the merchandise in its new location, or to have it removed to its original location within the period of five days, should a fire occur, the insurers would not be liable.

PROPERTY NOT ACCEPTED.—The company will not accept liability for loss to the following:

Uninsurable property
Accounts or bills
Currency or money
Notes
Evidences of debts
Securities
Deeds

Exception is taken to these classes of property on account of difficulty in establishing their intrinsic value or the actual amount destroyed by fire.

EXCEPTIONS IN STANDARD FIRE INSURANCE POLICIES.—All of the losses described hereinbefore are subject to exceptions covered by the expression "except as herein provided." The policy definitely provides that certain classes of property, unless specifically mentioned in writing, and certain events, are not covered, and that the existence of certain conditions either voids the policy or modifies the liability of the insurer.

These exceptions include the following:

Bullion
Manuscripts
Drawings
Dies or patterns

HAZARDS NOT COVERED.—Loss or damage resulting from:

Invasion
Insurrection, riot, civil war or commotion
Military or usurped power
An order of any civil authority
Theft
Neglect of insured to save and preserve property endangered by fire in neighboring premises

Losses from any of the above hazards **may be covered separately,** and all except the last one occur under circumstances not contemplated at the time the policy is issued. In some of them right of redress against state or municipality exists.

LIABILITY IN CASE OF EXPLOSION OR LIGHTNING.—The policy provides for liability by the company only in the event of loss by **fire following an explosion or lightning.** No liability is assumed for loss or damage caused by an explosion or lightning which is not followed by fire. However, if a hostile fire should cause an explosion, the fire and explosion occurring in the same premises, the insurer or company is liable for loss to the extent of the risk assured.

COMMENCEMENT AND TERMINATION OF THE CONTRACT.—The policy, in accordance with the terms expressed therein, "does insure.....

for the term of.....from the.....day of.....19....at noon to the .....day of.....19....at noon."

The **term of the policy** is usually a period of 1, 3 or 5 years, beginning and terminating at noon as indicated above. Noon is defined to mean: "noon of standard time at the place of loss or damage." The date of termination may be left blank by agreement, although this is not usual, but in a few states perpetual policies are issued on certain kinds of risks.

Moment Policy Becomes Effective Vital.—From the standpoint of the insured it is vital that the moment at which the policy is to become effective be clearly and definitely known and established. It is obvious that unless the risk is accepted by the company and the policy becomes effective before a fire occurs no reimbursement for losses can be collected.

Delivery of Policy Not Essential.—The delivery of the policy to the insured is not essential, but the acceptance of the insurance contract by the insurer is.

"Binder" Used to Indicate Acceptance of Risk.—So that the insured may have written evidence of the acceptance of a risk, a general agent of the insurer frequently issues a statement binding the company to the acceptance of the risk and covering the property until (1) a period of 10 days from date of issue of binder has elapsed; or (2) a standard policy has been issued; or (3) noon of the second business day after written notice of cancellation is given to the assured or his agent.

COMMENCEMENT IN CASE OF RENEWAL.—In practice, the broker or agent of the insured usually notifies the insured of the date of expiration of the policy and proceeds to secure a renewal of the contract so that the new contract becomes effective on the same terms immediately upon the expiration of the original policy.

NEW CONTRACTS ISSUED ON RENEWALS SHOULD BE COMPARED.—It is advisable that new contracts issued on renewals be compared with the expired contracts to make sure that terms, description of property, voided exceptions, and special arrangements be properly recorded thereon. Care should be taken to have the necessary changes made where conditions of the insured have changed, not only in regard to amount and kind of property, but also the nature of the hazard. Neither the violations which existed during the term of the old policy, nor the privileges not recorded, but enjoyed, are transferred or considered applicable to the new policy, unless specific provision is made therefor.

TERMINATION OF THE CONTRACT.—A contract or policy may be terminated (voidance will be covered later) by any of the following: (1) expiration of the term stipulated therein, if renewal is not secured; (2) cancellation by the insured; (3) cancellation by the insurer; (4) occurrence of an event stipulated therein.

1. **Expiration of the Term of the Contract.**—It is incumbent upon the insured to secure a renewal before the expiration of the term of the policy if he desires to continue the protection. He has **no right of redress** from the company, or insurer if he or his agent fails to secure renewal in time.

2. **Cancellation by the Insured.**—The policy provides for cancellation "at any time at the request of the insured." No other obligations are imposed upon the insured.

3. **Cancellation by the Insurer.**—The policy stipulates that it can only be cancelled by the insurer by a five days' notice in writing which must either

tender or offer to tender the unearned premium. Ten day's notice is required to a mortgagee.

4. **Occurrence of an Event Stipulated Therein.**—The policy definitely stipulates that "if a building or any material part thereof falls, except as the result of a fire, all insurance by this policy shall immediately cease." It will be noted that the building or "a material part" shall fall before the insurance ceases. The insertion of "material part" has in the past compelled the companies to prove that a material part of the building had fallen. The reason for this clause is the fact that after a building has fallen, the risk in the case of the building and the hazard in the case of the contents have both changed.

INTERRUPTION OR TEMPORARY SUSPENSION.—The existence of any of the following conditions usually causes interruptions or temporary suspension of the contract.

Other Insurance.—Insurance of the same property in more than one company is usually permitted except in the case of farm property. The standard policy form lists this item as an exception, but riders are usually attached permitting it.

Increase of Hazard.—The insurer will not assume liability of a risk if the insured should increase the danger or hazard of fire by means within his control or knowledge. Unless specifically permitted the insurer will not assume liability for loss or damage under following conditions:

1. **Repairs, etc.** While mechanics are altering or repairing the described premises beyond a period of 15 days.
2. **Explosives, gas, etc.** While illuminating gas or vapor is generated on the premises, or, fire works, greek fire, phosphorus, explosives, gasoline, naptha or any other petroleum products of greater inflammability than kerosene oil are kept or used on the premises or gunpowder exceeding 25 pounds; or kerosene oil exceeding 5 barrels is kept on the premises.
3. **Factories, working hours and idleness.** In the case of a manufacturing establishment while operated in whole or in part between the hours of 10.00 P.M. and 5.00 A.M. or while it ceases to be operated beyond a period of ten days.
4. **Unoccupancy.** While the property at risk "whether intended for occupancy by owner or tenant is vacant or unoccupied beyond a period of ten days." "Vacant" as used here may be taken to designate absence of any person or thing, while "unoccupied" would indicate absence of persons.

VOIDANCE OF CONTRACT.—There are two main divisions of actions or conditions which render the policy void. These appear on the standard policy form indexed as follows: (1) fraud, misrepresentation, etc.; (2) ownership, etc.

Fraud, Misrepresentation, etc.—To quote the policy, "This entire policy shall be void if the insured has concealed or misrepresented any material fact or circumstance covering this insurance or the subject thereof; or in case of any fraud or false swearing by the insured touching any matter relating to this insurance or the subject thereof, whether before or after a loss."

Ownership, etc.—The policy stipulates that it shall be void, unless otherwise provided by agreement in writing added to it by the company, if any of the following conditions become existent or actions are taken:

1. Conditional or partial ownership.
2. Building insured not on ground owned by insured in fee simple.

3. Foreclosure or sale of property under mortgage or deed of trust.
4. Change of interest, title or possession, other than by death of insured and except change of occupants without increase of hazard.
5. Assignment of policy before loss, without consent of company to assignment.

1. Conditional or Partial Ownership.—The stipulation in the policy reads—"if the interest of the insured be other than unconditional and sole ownership" unless as stated above "otherwise provided by agreement." This condition would exist in any of the following cases:

A mortgagee who failed to protect his interest by specific arrangement.
A stockholder in a corporation who attempted to insure the property of the corporation in his own name.
A partner who insures the property of a partnership in his own name.
The owner of property purchased on the installment plan where the seller retains title until installemnts are paid.

2. Building on Ground Not Owned in Fee Simple.—Unless otherwise provided a policy is void where a building insured is built on ground which is not owned by the assured in fee simple. By fee simple is meant absolute ownership free from conditions or limitations. The reason for this provision is the possibility of a **sudden diminution of the value of the building,** which would occur if, as the result of some action relative to the ground, it becomes imperative that the building be removed.

3. Foreclosure or Sale of Property under Mortgage or Trust Deed.—Unless otherwise provided, voidance occurs "if with the knowledge of the insured, foreclosure proceedings be commenced or notice given of sale of any property insured hereunder by reason of any mortgage or trust deed." In foreclosure proceedings the moral hazard is naturally increased and when the sale of a portion of property occurs, the value of the remaining property might depreciate materially.

4. Change of Interest, Title or Possession.—The policy becomes void "if any change, other than by death of an insured, takes place in the interest, title or possession of the subject of insurance (except change of occupants without increase of hazard)." It is obvious that a contract protecting the interest of one individual, partnership, corporation, etc., must become void when said interest is transferred to another. As previously stated, insurance covers the **interest of a person in the property mentioned and not the property.** When there is a change in hazard, therefore, it is to the interest of both parties to the contract to see that their respective interests or liabilities are properly defined and/or protected.

5. Assignment of Policy before Loss.—The policy is void if an assignment is made without the consent of the insurer. It would be obviously unfair to the insurer if an assignment be made by the insured to anyone unacceptable to the insurer. Most policy forms provide endorsements, one for the assignment by the insured and the other for the consent of the insurer.

The following is a **form of assignment** of the interest of the insured:

> The interest of ..... as owner of the property covered by this Policy is hereby assigned to ..... subject to the consent of The ..... Insurance Company, New York.
>
> .....
> **(Signature of Insured)**
>
> **Dated** ..... **19**..

The following is a form of the company's consent to the assignment of the interest:

> The ..... Insurance Company, New York, hereby consents that the interest of ..... as owner of the property covered by this Policy be assigned to .....
>
> .....
> (Agent)
>
> Dated ..... 19.. .

PROOF AND SETTLEMENT OF LOSSES.—The **requirements in case of loss** stipulated in the policy are that the insured does the following:

1. Gives **immediate notice in writing** to the company.
2. Protects the property from **further damage.**
3. Separates the damaged and undamaged property.
4. Puts the property in best order possible.
5. Furnishes a **complete inventory** of destroyed, damaged and undamaged property, stating the quantity and cost of each article and the amount claimed thereon.
6. Renders to the company within 60 days after the fire (unless such time is extended by the company) a **proof of loss** signed and sworn to and stating the knowledge and belief of the insured as to the following:
   (a) The time and origin of the fire.
   (b) The interest of the insured and all others in the property.
   (c) The cash value of each item thereof and the amount of loss or damage thereto and all encumbrances thereon.
   (d) All other contracts of insurance whether valued or not covering the property.
   (e) Any change in the title, use, occupation, location, possession or exposures of said property since the issuing of the policy.
   (f) By whom and for what purpose any building described and the several parts thereof were occupied at the time of the fire.

Other provisions for submission of plans, examination of books of accounts, bills, vouchers, records, etc., are also set forth in filing proof of loss.

APPRAISAL IN CASE OF DISAGREEMENT.—"In case the insured and the company shall fail to agree as to the amount of loss or damage, each shall on the written demand of either, select a **competent and disinterested appraiser.**"

The appraisers first select a competent and disinterested **umpire;** and failing for 15 days to agree upon such umpire, then, on request of the insured or the company, such umpire is selected by a judge of a court of record in the state in which the property insured is located. The appraisers then appraise the loss and damage stating separately sound value and loss or damage to each item. Failing to agree, they submit the differences to the umpire. An award in writing so itemized, of any two filed with the company, determines the amount of sound value and loss or damage.

Each appraiser is paid by the party selecting him, and the expenses of the umpire are paid by the parties jointly.

OPTIONS OF COMPANY.—It is optional with the company to take all or any part of the articles at the agreed or appraised value, and also to repair, rebuild or replace the property lost or damaged with other of like quality within a reasonable time, on giving notice of its intention so to do within 30 days after the receipt of proper statement of loss herein required; but there can be no abandonment to the company of any property.

WHEN LOSS PAYABLE.—The amount of loss or damage for which the company may be liable is payable **60 days after proof of loss** is received by the company and ascertainment of the loss or damage is made either by agreement between the assured and the company expressed in writing or by the filing with the company of an award therein provided.

SUITS.—In order **to prevent unreasonable delay** on the part of either insured or insurer where question of the company's liability is involved, the policy provides: "No suit or action on this policy, for the recovery of any claim, shall be sustainable in any court of law or equity unless all requirements of the policy shall have been complied with nor unless commenced within twelve months next after the fire."

SUBROGATION.—In order to be able to collect all amounts possible of collection from a third party for a loss or damage for which it has settled, the company reserves the right of **requiring an assignment of rights by the insured.**

Example: Through the negligence of a third party loss or damage may have been caused to property of the insured, the insured may recover from the third party at law. It is obvious that if the insured collects from the insurance company, the company should receive the right of subrogation; in other words, it should be given the right to collect from the third party.

Another illustration is that of a mortgagee who insures his rights under a separate policy. The amount received from the insurance company would not affect his right to collect the full amount due from the mortgagor, and unless the right of subrogation is given to the insurance company, he would be able to collect twice the amount actually advanced on the mortgage.

FIRE INSURANCE FORMS AND CLAUSES.—The standard fire insurance policy is, as the name implies, standard, but as there are varying conditions and circumstances applicable to the individual risks, it is necessary to provide **means of adapting the standard forms** to such conditions or circumstances. This is accomplished by **means of riders (attachments) or endorsements.** These may be put in **two classes, forms and clauses.** Forms are usually descriptive, supplementing the standard policy. Clauses are usually added to adapt some stipulations to the use of the insured, or to modify the operation of stipulations.

Forms Used.—Forms are used for the following purposes:

Ownership. To describe ownership where conditional.
Ground ownership. To describe or give recognition to the fact that buildings insured are on leased or encumbered ground with full knowledge of the company.
Mortgage. To disclose the interest of the insured.
Change of interest. To recognize change of interest, title, or occupancy approved by the company.
Commission forms. To describe property of others for which the insured is liable.
Description of property. To describe in exact detail the nature of property insured.
Location of property. To describe location of property.
Variable locations. To describe approved locations of property being constantly shifted and constituting a "floating policy."

Clauses.—Clauses are used to modify provisions of the standard policy. To illustrate some of the **more common uses** that are made of clauses the following are listed:

Permits:

To permit the **moving** of property.

To permit extensive **repairs** or alterations.

To permit **vacancy** for a longer period than is stipulated in the policy.

To permit operating **overtime.**

To permit the **storage** of inflammable, combustible or dangerous articles.

Limitations:

To limit liability of insurer on **certain property** on account of its nature.

To stipulate **conditional** assumption of liability.

To limit damage consequent to **certain occurrences** such as loss or damage by change in temperature in cold storage warehouses.

To limit damage to electric generating machinery to outside fire; in other words, exempt the insurer from liability for damage caused by internal irregularities of **dynamos** or electrical apparatus. The electrical hazard for loss in excess of $100 to assured in electrical generating stations if fire ensues is now assumed.

To limit the **amount payable** to the ratio of coverage carried to coverage required. This clause is discussed more fully under separate paragraph.

CO-INSURANCE CLAUSE.—The co-insurance clause is intended to protect the interest of both the insured and the insurer, but in order to fully appreciate this fact, the underlying principles must be considered.

The basic principle of insurance is the most important of the principles underlying the co-insurance clause which is that insurance is in effect a distribution of the losses of one over many. This distribution is accomplished by an insurance company through its collection from each policy holder of a comparatively small sum in the form of premium. The premiums are computed on rates which, in the final analysis, are fixed so that when they are multiplied by the amount of insurance earned, they should produce from the many policy holders a fund sufficient to:

1. Pay all ordinary losses when they occur.
2. Pay the expenses of conducting the business.
3. Provide a reserve for extraordinary losses.
4. Provide a fair return to the stockholders of stock companies.

Therefore, if the policy holders fail to carry the amount of insurance required by the terms of the policies, the rate would not result in the premiums being in the aggregate sufficient to meet the losses, expenses, etc., and the company would not be in a position to meet the losses, etc., with a final result of loss to the policy holders in some form.

It would be obviously unfair for policy holders who lived up to their contracts and paid premiums on the full value of the property covered, to be put on the same footing as those who failed to carry adequate insurance; in other words, to be compelled to share the greater part of the losses of the less conscientious. It was with a view to remedying such conditions as these that the co-insurance clause was introduced.

PROVISIONS OF CO-INSURANCE CLAUSE.—The co-insurance clause provides in the abstract that where a policy holder fails to carry an amount of insurance which bears the relationship to the value of the property, which is required by the terms of the clause, he should be considered as having assumed **self-insurance** for the amount of the shortage. For example, if an owner who has property, the cash value of which is $10,000, insures it under an 80% co-insurance clause for only $5,000 he would be carrying self-insurance from the insurer's point of view of $3,000 and is a **co-insurer** to the extent of 3/8ths of

the maximum liability. If there should be a loss of $3,000, in fairness to others who carry an adequate amount, he should not be reimbursed in full for his loss, but should receive only 5/8ths of the loss. To reimburse him for the full amount of the loss would be equal to paying him $8,000 if the property were entirely destroyed while he only paid for the protection of $5,000.

The following **examples illustrate** the operation of co-insurance on the basis of 80% and 100%:

80% Co-insurance Clause

Example A

Sound value of property	$10,000	
Insurance	8,000	
Loss	$5,000	
Insurance carried $8,000 / Insurance required $8,000 = 100% of loss payable =		$5,000

Example B

Sound value of property	$10,000	
Insurance carried	6,000	
Loss	$5,000	
Insurance carried $6,000 / Insurance required $8,000 = ¾ of loss payable =		$3,750

100% Co-insurance Clause

Example A

Sound value of property	$10,000	
Insurance carried	8,000	
Loss	$5,000	
Insurance carried $ 8,000 / Insurance required $10,000 = 8/10 of loss payable =		$4,000

Example B

Sound value of property	$10,000	
Insurance carried	6,000	
Loss	$5,000	
Insurance carried $ 6,000 / Insurance required $10,000 = 6/10 of loss payable =		$3,000

DANGERS OF FAILURE TO BASE INSURANCE ON INCREASED VALUES.—During periods of rising costs considerable loss may be suffered by an insured who fails to increase his insurance to a basis equal to the **cost of replacement of the property.** While he may have met the requirements of the co-insurance clause when the insurance was placed originally, the increased values since that time would cause him to be a co-insurer to a great extent. This can be shown by the following example:

Original cost of property		$100,000
Insurance carried on a basis of 80% co-insurance		80,000
Replacement value of property today, less depreciation		200,000
Loss on property		100,000
Settlement by insurance company:		
Requirement 80% of	$200,000	
Reimbursement based on:		
Insurance carried $ 80,000 / Insurance required $160,000 = ½ of loss =		$50,000
Actual loss		$100,000
Reimbursement		50,000
Net loss to the insured, not covered by insurance		$ 50,000

The insured should always bear in mind that a loss necessitates replacement, and original cost is past history in a period of rising costs. To permit the insurance to stand as originally figured would be equivalent to selling merchandise on the basis of cost when the market for such merchandise had advanced, say, 100%.

FIRE INSURANCE RATES.—The methods employed by the various **rating bureaus** are not fully standardized, making it impracticable to go into detail on the subject of rate making. However, a high degree of co-operation exists among the various **underwriters' associations** in the work of collecting and analyzing data on the actual experience of a number of fire insurance companies over a number of years in various locations and among various classes of risks. The exchange of this information and general interchange of ideas permits of the application of the combined judgment of a number of individuals, all of which tend to make the bases of rates a fair average and therefore more reliable. The competition among the various types of fire insurance organizations, combined with the supervision exercised by the authorities of the various states, have resulted in rates, which if not as low as they might be, are generally logical and free from discrimination.

DEAN ANALYTICAL SYSTEM.—While the methods of rate construction differ in detail, the main underlying principles and in most cases the results are practically the same as those obtained by the Dean Analytical System used in about 22 states. The **objective of this system** is, first, to establish equitable **basic rates** by methodical analyses of basic factors and comparisons of actual conditions with determined standards; secondly, to provide a **flexible and logical method of constructing specific rates** based on these basic rates, reducing the possibilities of discrimination and errors of omissions to a minimum. The basic rates are established in three operations, viz.:

1. Grading of towns.
2. Grading of types of structures.
3. Establishing basic rates for each type of structure in each grade of town.

Grading of Towns.—The analytical system provides for **10 classes of towns** —from number one class, the highest, with almost ideal conditions from an insurance point of view, to class 10, towns and villages without any fire protection.

This operation of grading consists of carefully comparing with fixed standards the actual status of each town in regard to:

Water supply	Building laws
Fire department	Hazards
Fire alarm	Structural conditions
Police	

Each of the above factors is considered and a number of points credited according to the relation of the actual status to the standards. The total number of points decides the classification of each town.

Grading of Types of Structures.—Three types are used: brick, frame, and fireproof.

Establishing Basic Rates.—Basic rates are then established for **each type of structure** influenced by the number of stories for each of the ten classes of towns. The construction of rates applicable to **specific buildings** using the basic rates established, is accomplished by inspection of the individual building, adding to the basic rate charges for (1) deficiencies from the standards for structural features, (2) for class of occupancy, and (3) credits for protective equipment.

Structural Features.—Standards are fixed for the following structural features: area, wall deficiencies, floor openings, skylights, and attachments of inferior construction.

Occupancy Classification.—Every type of business is considered and graded, as far as buildings are concerned, according to the inherent hazard of the business occupying the building and the combustibility of the materials used or stored therein. In connection with **rates upon contents,** the damageability of the stock enters into the calculation. Additional charges are made for **exposure to fire** from outside sources.

Credits for Protective Equipment.—Credits are allowed in reduction of rates for various items, such as:

Automatic sprinklers	Watchman's service
Inside standpipe and hose equipment	Private fire brigade
Chemical extinguishers	Pails filled with water

REVISION FOR RATING.—Any insured may secure from the **rating board** for his district or town a **schedule** showing the construction of rate applicable to the property covered by him. He may apply directly to the rating board or he may give his broker or insurance company a letter of authority to secure the schedule. If it is found on examination of the schedule that inadequate credit has been allowed for improved conditions **a claim for revision of the rate** should be filed with the rating board. The same is true in regard to excessive charges.

Factors Influencing Reductions in Rates.—Rates of insurance may be reduced by a reduction of the fire hazard in the following ways:

Improving physical conditions in and about the property.
Introducing and maintaining protective measures.
Improving water supply.
Frequent and capable inspection.
Installing sprinkler systems.

CONCURRENCY.—On the back of the standard form of fire insurance policy there is a statement on concurrency which reads: "It is important that the written portions of all policies covering the same property read exactly alike. If they do not, they should be made uniform at once." The importance of this statement is not generally appreciated.

If policies on the same property are not concurrent, complications may arise affecting adversely the settlement of any loss. Where such policies contain co-insurance clauses, the provisions of which differ, some containing the distribution average clause and others without such clauses, there is a possibility of the insured being liable for a portion of the loss, notwithstanding his having total insurance in excess of the value of the property. Recent rulings—the "Griswold" ruling in particular—have, however, held that so long as sufficient total insurance is carried the insurer would recover his losses. In any event delays and controversy may arise.

It can be readily seen that where some policies cover property in one location specifically and others cover the same property generally (blanket policies), there would be difficulty in establishing the exact amount of insurance carried on such property in the event of a loss. Wherever policies overlap in their coverage of property, difficulty will be experienced along these lines. Policies should be so written that there can be no question as to the extent of coverage and the property covered.

VALUED POLICY.—A statute exists in some states providing that the amount of insurance covering a building, in force at the time of loss, shall be considered the value of such building regardless of its actual value. Under this statute if a building be destroyed or so far destroyed as to be considered completely so, insurance must be paid to the full amount of the policy regardless of whether such insurance is excessive or not.

SPRINKLER LEAKAGE INSURANCE.—A fire hazard is reduced through the installation of a **sprinkler system** consisting of a pressure waterflow piped over the building with heads located according to requirements. Each head is so constructed that it releases the flow of water when the temperature in its location increases above the danger point. Incidental to the installation of such a system is a liability to damage of property due to accidental opening of these heads. Loss due to this cause may be covered by sprinkler leakage insurance. A special form is usually attached to the policy or a sprinkler leakage policy may be issued as illustrated below.

The installation of a sprinkler system brings about an **appreciable reduction in the rates** of fire insurance applicable to the building as well as contents so protected. The saving in rates in most cases is sufficient to pay for the installation of the system within a period of a few years and in some cases with other improvements within 2 years, even considering interest on additional investment. The majority of mutual insurance organizations will not consider a risk which is not so protected.

Limit of Sprinkler Leakage Insurance.—The limit of sprinkler leakage insurance is governed by the **amount of fire insurance carried** and is based on a percentage of such amount, the rates being so arranged that no advantage is gained by inadequate coverage under any arrangement. For example, if the required percentage of sprinkler insurance is 25% under the co-insurance arrangement, the rate would be at a minimum point, whereas with no co-insurance clause the rate would be at a maximum. Damage caused by sprinkler leakage rarely exceeds 25% of the total value of property. Actual conditions as they affect the possibility of damage and the nature of the property should govern the extent of protection necessary.

SPRINKLER LEAKAGE POLICY—FORM B

STOCK COMPANY

No. S.L..... $.....

THE BLANK FIRE INSURANCE COMPANY OF NEW YORK

Amount $..... Rate..... Premium $.....

In Consideration of the Stipulations herein named

and of ..... Dollars Premium

does insure .....

and legal representatives, to the extent of the actual cash value (ascertained with proper deductions for depreciation) of the property at the time of loss or damage, but not exceeding the amount which it would cost to repair or replace the same with material of like kind and quality within a reasonable time after such loss or damage, without allowance for any increased cost of repair or reconstruction by reason of any ordinance or law regulating construction or repair and without compensation for loss resulting from interruption of business or manufacture, for the term of ..... from the ..... day of ..... 19.., at noon, to the .....day of ..... 19.., at noon, against all DIRECT LOSS AND DAMAGE BY "SPRINKLER LEAKAGE," except as herein provided, to an amount not exceeding .....

..... Dollars, to the following described property while located and contained as described herein, but not elsewhere, to wit:

.....

.....

This policy is made and accepted subject to the foregoing stipulations and conditions, and to the stipulations and conditions printed on the back hereof, which are hereby made a part of this policy, together with such other provisions, stipulations and conditions as may be endorsed hereon or added hereto as herein provided.

In Witness Whereof, this Company has executed and attested these presents; but this policy shall not be valid until countersigned by the duly authorized Agent of the Company at.....

Countersigned at.....

this ..... day of ..... 19.. .....Agent

Sprinkler leakage. Wherever in this policy the term "Sprinkler Leakage" occurs, it shall be held to mean leakage, discharge or precipitation of water from the "Automatic Sprinkler System," resulting in loss or damage, to property described herein, whether the "Sprinkler Leakage" originates in the portion occupied by the insured or not, including "Sprinkler Leakage" caused by freezing.

Automatic sprinkler system. Wherever in this policy the term "Automatic Sprinkler System" occurs, it shall be held to mean the automatic sprinkler heads, sprinkler pipes, valves and fittings, tanks, pumps and underground mains supplying the automatic sprinklers, within the premises described herein; but does not include non-automatic sprinkler systems, hydrants, standpipes, hose or service pipes, and/or connections thereto, nor any part of the extinguishing or service equipment other than the "Automatic Sprinkler System."

Damage to automatic sprinkler system. This Company shall not be liable for loss or damage to the "Automatic Sprinkler System," unless liability is specifically assumed hereon for a stated amount, under a separate item, mentioning no other kind of property.

Fraud, misrepresentation, etc. This entire policy shall be void if the insured has concealed or misrepresented any material fact or circumstance concerning this insurance or the subject thereof; or in case of any fraud or false swearing by the insured touching any matter relating to this insurance or the subject thereof, whether before or after a loss.

Hazards not covered. This Company shall not be liable for loss or damage caused directly or indirectly by fire, lightning, cyclone, tornado, windstorm, earthquake, explosion, including explosion and/or ruptures of steam boilers and fly-wheels, blasting, invasion, insurrection, riot, civil war or commotion, or military or usurped power, or by order of any civil authority; or by theft; or by neglect of the insured to use all reasonable means to save and preserve the property at and after a "Sprinkler Leakage."

Fall of building. If a building, or any material part thereof, fall except as the result of "Sprinkler Leakage," all insurance by this policy on such building or its contents shall immediately cease.

Added clauses. The extent of the application of insurance under this policy and of the contribution to be made by this Company in case of loss or damage, and any other agreement not inconsistent with or a waiver of any of the conditions or provisions of this policy, may be provided for by agreement in writing added hereto.

Uninsurable property. This policy shall not cover accounts, bills, currency, deeds, evidence of debt, money, notes or securities.

Excepted property. This Company shall not be liable to an amount exceeding 10% of this policy for loss or damage to manuscripts, models, mechanical drawings, lasts, dies or patterns, unless liability is specifically assumed hereon for a stated amount, under a separate item, mentioning no other kind of property.

This entire policy shall be void, unless otherwise provided by agreement in writing added hereto,

Ownership, etc. (a) if the interest of the insured be other than unconditional and sole ownership; or (b) if the subject of insurance be a building on ground not owned by the insured in fee simple; or (c) if, with the knowledge of the insured, foreclosure proceedings be commenced or notice given of sale of any property insured hereunder by reason of any

mortgage or trust deed; or (d) if any change, other than by the death of an insured, take place in the interest, title or possession of the subject of insurance (except change of occupants without increase of hazard); or (e) if this policy be assigned before a loss.

Unless otherwise provided by agreement in writing added hereto this Company shall not be liable for loss or damage,

Repairs, alterations and extensions. (a) from repairs, alterations and/or extensions to the "Automatic Sprinkler System," buildings or premises, except that ordinary minor repairs necessary to the care and maintenance of the "Automatic Sprinkler System," buildings or premises, are permitted; or

Unoccupancy. (b) while a described building is vacant or unoccupied; or

Chattel mortgage. (c) to any property insured hereunder while incumbered by a chattel mortgage, and during the time of such incumbrance, this Company shall be liable only for loss or damage to any other property insured hereunder.

Waiver. No one shall have power to waive any provision or condition of this policy except such as by the terms of this policy may be the subject of agreement added hereto, nor shall any such provision or condition be held to be waived unless such waiver shall be in writing added hereto, nor shall any provision or condition of this policy, or any forfeiture be held to be waived by any requirement, act or proceeding on the part of this Company relating to appraisal or to any examination herein provided for; nor shall any privilege or permission affecting the insurance hereunder exist or be claimed by the insured unless granted herein or by rider added hereto.

Cancellation of policy. This policy shall be cancelled at any time at the request of the insured, in which case the Company shall, upon demand and surrender of this policy, refund the excess of paid premium above the customary short rates for the expired time. This policy may be cancelled at any time by the Company by giving to the insured a five days written notice of cancellation with or without tender of the excess of paid premium above the pro rata premium for the expired time, which excess, if not tendered, shall be refunded on demand. Notice of cancellation shall state that said excess premium (if not tendered) will be refunded on demand.

Pro rata liability. This Company shall not be liable for a greater proportion of any loss or damage than the amount hereby insured shall bear to the whole insurance covering the property, whether valid or not and whether collectible or not.

Noon. The word "noon" herein means noon of standard time at the place of loss or damage.

Requirements in case of loss. The insured shall give immediate notice, in writing, to this Company, of any loss or damage, protect the property from further damage, forthwith separate the damaged and undamaged personal property, put it in the best possible order, furnish a complete inventory of the destroyed, damaged and undamaged property, stating the quantity and cost of each article and the amount claimed thereon; and, **the insured shall, within sixty days after the "sprinkler leakage," unless such time is extended in writing by this Company, render to this Company a proof of loss,** signed and sworn to by the insured, stating the knowledge and belief of the insured as to the following: the time and cause of the "Sprinkler Leakage," the interest of the insured and of all others in the property, the cash value of each item thereof and the amount of loss or damage thereto, all other contracts of insurance, whether valid or not, covering any of said property, any changes in the title, use, occupation, location or possession, of said property since the issuing of this policy, by whom and for what purpose any building herein described and the several parts thereof were occupied at the time of the "Sprinkler Leakage"; and shall furnish a copy of all the descriptions and schedules in all policies and if required, verified plans and specifications of any building, fixtures or machinery destroyed or damaged. The insured, as often as may be reasonably required, shall exhibit to any person designated by this Company all that remains of any property herein described, and submit to examinations under oath by any person named by this Company, and subscribe the same; and, as often as may be reasonably required, shall produce for examination all books of account, bills, invoices, and other vouchers, or certified copies thereof, if originals be lost, at such reasonable time and place as may be designated by this Company or its representative, and shall permit extracts and copies thereof to be made.

Appraisal. In case the insured and this Company shall fail to agree as to the amount of loss or damage, each shall, on the written demand of either, select a competent and disinterested appraiser. The appraisers shall first select a competent and disinterested

umpire; and failing for fifteen days to agree upon such umpire then, on request of the insured or this Company, such umpire shall be selected by a judge of a court of record in the state in which the property insured is located. The appraisers shall then appraise the loss and damage stating separately sound value and loss or damage to each item; and failing to agree, shall submit their differences only, to the umpire. An award in writing, so itemized, of any two when filed with this Company shall determine the amount of sound value and loss or damage. Each appraiser shall be paid by the party selecting him and the expenses of appraisal and umpire shall be paid by the parties equally.

Company's options. It shall be optional with this Company to take all, or any part, of the articles at the agreed or appraised value, and also to repair, rebuild, or replace the property lost or damaged with other of like kind and quality within a reasonable time, on giving notice of its intention so to do within thirty days after the receipt of the proof of loss herein required; but there can be no **abandonment** to this Company of any property.

When loss payable. The amount of loss or damage for which this Company may be liable shall be payable sixty days after proof of loss, as herein provided, is received by this

Permit for Assignment of Interest.

(Actual Sale and Transfer of Title.)

NOTE—*To Secure Mortgagees, if desired, the Policy should be made payable on its face to such Mortgagee, as follows: Loss, if any, payable to* JOHN DOE, *Mortgagee, as per "Collateral Security Clause."*

The interest of ..... as owner of the property covered by this Policy is hereby assigned to ..... present owner, subject to the consent of The Blank Fire Insurance Company of New York.

Dated ..... 19.. .....Assured.

The Blank Fire Insurance Company of New York hereby consents that the interest of ..... as owner of the property covered by this Policy be assigned to ..... present owner, all other terms and conditions remaining unchanged.

Dated ..... 19.. .....Agent.

Collateral Security Clause.

The Blank Fire Insurance Company of New York is hereby requested by the assured to make loss, if any, under this Policy payable to ..... of ..... Mortgagee , to the extent of ..... interest may appear, subject nevertheless to all the conditions of this Policy.

Dated ..... 19.. .....Assured.

At the request of the assured, loss, if any, under this Policy is made payable to ..... Mortgagee , as ..... interest may appear, subject nevertheless to all the conditions of this Policy.

Dated ..... 19.. .....Agent.

Removal Endorsement.

Permission is hereby granted to remove the property insured by this Policy to the

..... story ..... roof .....

building, occupied as .....

and situate .....

.....

and this Policy is hereby made to cover same property in new locality, all liability in former locality to cease from this date.

New Location shown on Map, Sheet ..... Block ..... No. .....

New Rate ..... Additional Premium, $.....

Old Rate ..... Return Premium, $.....

Dated ..... 19.. ..... Agent.

Company and ascertainment of the loss or damage is made either by agreement between the insured and this Company expressed in writing or by the filing with this Company of an award as herein provided.

Suit. No suit or action on this policy, for the recovery of any claim, shall be sustainable in any court of law or equity until after full compliance by the insured with all the foregoing requirements, nor unless commenced within twelve months next after the "Sprinkler Leakage," provided that where such limitation of time is prohibited by the laws of the State wherein this policy is issued, then and in that event no suit or action under this policy shall be sustainable unless commenced within the shortest limitation permitted under the laws of such State.

Subrogation. This Company may require from the insured an assignment of all right of recovery against any party for loss or damage to the extent that payment therefor is made by this Company.

PROFITS INSURANCE.—The protection provided for by fire insurance is against financial loss resulting from loss or damage to property by fire. The reimbursement is based on the value of the property destroyed and does not include profits which would have resulted from sale or use of such property but for the fire. Profits insurance furnishes this additional protection.

Great care is exercised by insurance organizations in the selection of risks. The **moral hazard is great** since the insured is certain of the same profits in the event of a fire as he would have realized when the merchandise had been disposed of and the proceeds of sale collected.

USE AND OCCUPANCY INSURANCE.—In the event of a fire which causes total or partial suspension of business the owner would sustain a loss of the net profits which would have resulted but for the interruption or diminution of its productivity through the fire. In addition to the loss of the net profits the business would be compelled to pay certain expenses that would continue regardless of the amount of business done. Indemnification against such losses as these is the purpose of use and occupancy insurance.

If there is a fire loss or damage which does not cause an interruption of business, there may be a loss of profits but this loss is not covered by use and occupancy insurance. Profits insurance previously described provides indemnity in such cases.

Basis of Use and Occupancy Insurance.—As stated, the indemnification of loss of net profits and fixed expenses is the purpose of use and occupancy insurance. Therefore, it is necessary to know what these losses might be in the event of a fire in order to adequately cover them. Where previous experience exists, a sound estimate can be made which must consider the trend of business. Where there was no previous experience, an **estimate** may be made **on the basis of like concerns and on the operating policies and budgets of the business.** The total of such an estimate is the basis of insurance and should be the total liability which the business should ask the insurance company to assume. Expenses necessary to reduce the loss under the policy are to be considered as being subject to indemnification.

THE LIABILITY ASSUMED BY THE INSURANCE COMPANY.—The insurance company assumes a total liability not to exceed the "actual loss sustained" which, however, cannot be in excess of the total liability agreed upon and stated in the policy. This amount divided by 300 is the **maximum per diem liability** assumed by the company unless it is agreed that where the business operates Sundays and holidays, 365 will be used. However, special clauses may be used which consider seasonal fluctuations. In such cases, the periods and the per diem liability applicable to each period are specifically listed in the policy.

In the event of a fire causing **total suspension,** the per diem liability assumed by the company or insurer is limited to the actual loss, not to exceed the per diem liability assumed by the company for each business day of such total suspension, due consideration being given to the experience before the fire and the probable experience thereafter.

During the time of **partial suspension** resulting from a fire, the company's liability is limited to that proportion of the per diem liability, which the decrease in production or business bears to the full daily production or business of all properties or plants described in the policy for a specific number of days of full operations next preceding the fire.

The following illustrates the computation of loss:

Full production, average for number of days stipulated	10,000 units
Production during partial suspension or operation....	8,000 units
Decrease in production.....	2,000 units
Company's liability, loss per day full production.....	$1,000
Loss per day collectible:	
$\frac{2,000}{10,000}$ or $1/5 \times \$1,000 = \$200$ per day	

IMPORTANCE OF ADEQUATE INSURANCE.—It must be borne in mind that the company's per diem liability is fixed, and only the proportion of this liability which the decrease in production or business bears to full production (an average of the actual full production or business) is collectible. Therefore, if the insured has failed to ask the company to assume an adequate amount of liability, he cannot expect to be reimbursed on the basis of full coverage. Using the preceding illustration, assume that the actual full production or business indicated that profits and expenses, etc., were $2,000, instead of the $1,000 which the insured covered. It is evident that the insured will only get 1/5 of $1,000, or $200 per day while his actual loss is 1/5 of $2,000, or $400 per day. It is, therefore, important that the business executive should keep his records so that he can adjust his insurance when the coverage is likely to prove inadequate.

HOW TO ASCERTAIN ADEQUATE COVERAGE.—The following is designed for use in the determination of the amount of use and occupancy insurance which should be adequate, without regard to the nature of the busi-

ness. The necessary modification can be made to adapt it to any particular business.

Estimated gross earnings for the most convenient period based on estimated production or sales, according to the nature of business, for the same period, anticipating market conditions	$.....
Less:	
Estimated cost of sales during the same period and basis as above	.....
Estimated Gross Profits	$.....
Deduct total of expenses which will and will not continue if business is suspended, taken from Col. 3, Schedule below	.....
Net profits, to be covered	$.....
Add. Total of Col. (1) Expenses which will continue	.....
Total coverage for period (if less than a year adjust to a yearly total)	$.....

To arrive at the per diem liability divide the totals by the number of business days in the period used.

Schedule of Expenses

	To Continue during Suspension (1)	Ceasing during Suspension (2)	Total (3)
Salaries and Wages:			
Executives	$.....	$.....	$.....
Superintendents	.....	.....	.....
Foremen	.....	.....	.....
Salesmen	.....	.....	.....
Employees generally	.....	.....	.....
Fixed Charges:			
Interest on mortgages (See note below in case of total destruction of property)*	.....	.....	.....
Interest on other indebtedness	.....	.....	.....
Dividends on cumulative preferred stock	.....	.....	.....
Rent or equivalent expenses	.....	.....	.....
Taxes (not including federal and state income taxes)	.....	.....	.....
Heating and lighting	.....	.....	.....
Insurance	.....	.....	.....
Telephone	.....	.....	.....
Other expenses	.....	.....	.....
Total	$.....	$.....	$.....

* Interest on mortgages which will be paid, in the event of total destruction of property, from the proceeds of fire insurance settlement, not to be included.

Separate Policies for Independent Plants or Units.—Where a business conducts several plants in different locations or units in the same location, performing distinctly different operations which may be continued independently, it is advisable to cover them under separate policies. This is particularly advisable where the real profits of the units may vary to any appreciable extent from one another; or where one or more plants are operating at a loss. It is advisable, however, to include under **one policy coverage** for all plants or units which are interdependent even to the extent of including **plants of other concerns** the product of which is essential to the continuous operation of the business.

REASONABLE TIME TO REPAIR OR REPLACE.—The policy provides that the loss liability of the company is limited to an amount of actual loss sustained for such a period as would be reasonably required to repair or replace the property destroyed or damaged.

USE AND OCCUPANCY ENDORSEMENTS.—Endorsements may be made in connection with riot and civil commotion, tornado, flood, explosion, fly wheel or boiler insurance, to cover use and occupancy indemnification.

EXPECTED CHANGES IN THE FORM OF USE AND OCCUPANCY POLICIES.—At the time of writing, July 1925, revolutionary changes are contemplated in the form of use and occupancy policies. While the form given has not been finally adopted as a standard, insurance has been written under the conditions stipulated therein by some reciprocal companies and by at least one stock company. It is expected that the form will be generally adopted substantially as it is.

The main differences from the existing form of policies are discussed below.

The proposed form **eliminates the per diem** liability. In place of this liability the proposed plan introduces a co-insurance basis which is set forth under the caption of **"Reduced Rate Contribution Clause"** in the specimen form embodied hereinafter. It is stipulated in this clause as follows:

"In consideration of the reduced rate at which this policy is written, it is expressly agreed that the Company shall be liable for no greater proportion of any loss than the amount of this policy bears to — per cent (—%) of the amount of Use and Occupancy value of the property herein described, such Use and Occupancy value being based on complete cessation of business for the period of twelve (12) months immediately following the fire."

Use and Occupancy Policy

....., INCORPORATED

As the Corporation is now or may hereafter be constituted

$..... On the Use and Occupancy of the Property described below.

The conditions of this contract are that if the buildings situate bounded by ..... Street, ... Street, and ..... Street, known as the ....., and occupied as ....., and/or machinery and/or equipment and/or stock contained therein, be destroyed or damaged by fire and/or lightning, occurring during the term of this policy so as to necessitate a total or partial suspension of business, this Company shall be liable under this Policy for the ACTUAL LOSS SUSTAINED, consisting of:

I. Net Profits on the business which is thereby prevented:
II. Such fixed charges and such expenses as would have been earned if operations had not been prevented or reduced:
III. Such expenses as are necessarily incurred for the purpose of reducing the loss under this policy:

For not exceeding such length of time as shall be required, with the exercise of due diligence and dispatch, to rebuild, repair or replace such part of said buildings and/or machinery and/or equipment and/or stock as may be destroyed or damaged (commencing with the date of the fire and not limited by the date of expiration of this policy), subject to the following conditions and limit, to-wit:

REDUCED RATE CONTRIBUTION CLAUSE

In consideration of the reduced rate at which this policy is written, it is expressly agreed that this Company shall be liable for no greater proportion of any loss than the amount of this policy bears to ninety per cent (90%) of the amount of the Use and Occupancy value of the property herein described, such Use and Occupancy value being based on complete cessation of business for the period of twelve (12) months immediately following the fire.

SPECIAL CONDITIONS

It is a condition of this insurance that:

A. Only so much of the Assured's payroll shall be covered as may be under contract or may be necessary to conserve the Assured's business organization for the purpose of prop-

erly resuming the normal business of the Assured with the same quality of service as existed immediately preceding the fire, not exceeding, however, the following percentages of payroll, to which extent the Assured hereby agrees to carry insurance in order to comply with the co-insurance clause incorporated in this policy:

1. Officers and executives, including buyers, department managers, assistant department managers, and honor roll..... 100% for full year.
2. All other payroll..... 100% for first three months.

B. In computing any loss under this policy, due consideration shall be given to the experience of the business before the fire and the probable experience thereafter.

C. The word "business" wherever used in this contract shall be construed to mean: "The carrying on of the business operations usual to the class of the Assured."

D. The Liability hereunder shall not exceed the amount of insurance by this policy, nor a greater proportion of any loss, than the insurance hereunder shall bear to all insurance, whether valid or not, and whether collectible or not, covering in any manner the loss insured against by this policy.

E. The assured shall not be entitled to compensation on account of delay which may be occasioned by any ordinance or law regulating construction or repair of buildings or by the suspension, lapse or cancellation of any license or lease.

F. As soon as practicable after any loss, the assured shall resume complete or partial operation of the property herein described and shall make use of other suitable property if obtainable, if by so doing the amount of loss hereunder will be reduced, and in the event of the assured continuing business (in whole or in part) at some other location, or using other property during the time occupied in repairing or reconstructing the property herein described, the results of the operations so conducted shall be taken into consideration in adjusting the loss under this policy.

G. Surplus machinery or duplicate parts thereof, equipment or supplies, and surplus or reserve stock, which may be owned, controlled or used by the assured shall, in the event of loss, be used in placing the property in condition of continuing or resuming business.

H. If this policy covers liability for suspension of business due to damage to or destruction of building, machinery and equipment only, this Company shall not be liable for any loss due to damage to or destruction of finished product and/or such materials as enter into and become part of the finished product.

I. If an immediate adjustment of any loss under this policy cannot be agreed upon, payments on account shall be made on the 15th of each calendar month following such loss. These monthly payments shall be as large as is compatible with the progress of the adjustment from month to month, but such monthly payments shall be made without prejudice to the final adjustment of the loss.

J. Any adjusted claim for loss under Paragraph III above, insuring expenses incurred for the reduction of any loss under this policy, shall not be included in computing the operation of the co-insurance clause herein, but such adjusted claim shall be admitted and paid provided the total insurance carried under this form shall be sufficient to cover the total adjusted loss, and provided such adjusted claim does not exceed the reduction of loss affected by such expenditure.

SPECIAL PRIVILEGES

Permission for other insurance; to use electricity, natural gas and steam for light and/or heat and/or power.

Privilege for present and other occupancies not more hazardous and to do such work and to keep and use such materials as are usual in such occupancies.

Privilege is hereby granted to have and use not exceeding one quart of gasoline, same to be kept in approved metal cans.

PERMIT FOR EXTRAORDINARY ALTERATIONS AND REPAIRS
(Sprinklered Risks)

In addition to the 15 days granted by the printed conditions of this policy, permission is hereby given for 60 days at any one time, to make alterations, additions or repairs, and

this policy (so far as it applies on buildings) shall also cover in accordance with the conditions of this policy all materials and supplies therefor, therein and adjacent, and such alterations or additions and (so far as it applies on contents) shall extend and cover in such additions.

It is understood and agreed that the terms and conditions of the "Automatic Sprinkler Clause" if attached to this policy shall remain in force and effect.

PERMIT FOR AUTOMOBILES TO ENTER PREMISES—"D"

In consideration of the compliance by the insured with the following warranties, permission is hereby given for automobiles while engaged in the transaction of livery or freight or delivery business to enter buildings described in this policy.

WARRANTIES:

1—That no claim shall be made for loss or damage to an automobile or any of its parts unless such automobile is specifically mentioned as insured under this policy.

2—That automobiles entering premises under the above permit shall remain only so long as may be necessary to load and/or unload, except that where the needs of the business occasionally require they may remain over night, a holiday, or a Sunday.

3—Unless otherwise permitted by endorsement hereon there shall be no gasoline kept on the premises, except that contained in the reservoirs of the automobiles.

4—That no gasoline reservoir of an automobile shall be opened, emptied or filled while on the above-mentioned premises, nor shall repair work be done to automobiles.

The term "gasoline" shall be held to include naphtha, benzine or any of the light products of petroleum by whatever name known.

The permission hereby granted is operative only when not in violation of any law, statute or municipal restriction.

LIGHTNING AND ELECTRICAL EXEMPTION CLAUSES

LIGHTNING CLAUSE: Except as provided in the Electrical Exemption Clause below this policy shall cover use and occupancy loss caused by lightning (meaning thereby the commonly accepted use of the term lightning and in no case to include loss or damage by cyclone, tornado or windstorm), not exceeding the sum insured, nor the interest of the insured in the property, subject to the terms and conditions of this form and the policy to which it is attached. Provided, however, if there shall be any other use and occupancy insurance on said property, this Company shall be liable only pro rata with such other insurance for any use and occupancy loss by lightning, whether such other insurance be against loss by lightning or not.

ELECTRICAL EXEMPTION CLAUSE: It is a special condition of this policy that this Company shall not be liable for any use and occupancy loss resulting from any electrical injury, disturbance or damage to dynamos, exciters, lamps, switches, motors or other electrical appliances or devices whether from artificial or natural causes, unless fire ensues, and then only for such use and occupancy loss as may be caused by such ensuing fire; this limitation to be operative notwithstanding any provision to the contrary in the lightning clause attached.

WATCHMAN AND CLOCK CLAUSE

No. 1. In consideration of a reduced rate of premium it is hereby warranted that the insured shall maintain an approved watchman's service with approved recording stations or watch clock at such times as the premises are not in actual operation.

AUTOMATIC SPRINKLER CLAUSE

This policy being written at a rate based on the protection of the premises by the Sprinkler System, it is a condition of this policy that, in so far as the Sprinkler System and the water supply therefor are under the control of the assured, due diligence shall be used by the assured to maintain them in complete working order, and that no change shall be made in the said system or in the water supply therefor without the consent of this Company in writing.

SPRINKLER SUPERVISORY CLAUSE

The Automatic Sprinkler Equipment in the within described premises, having been equipped with the Central Valve Alarm and Sprinkler Supervisory System, in full compliance with the rules and regulations of the Board of Fire Underwriters of ..... County, and a certificate issued to that effect, this policy is written at a reduced rate, in consideration of which it is warranted by the assured that due diligence shall be used in maintaining the equipment during the life of this policy.

Attached to and made a part of Policy No. .....
of the ..... Insurance Company of
.....

.....
Agents.

APPLICATION OF THE CO-INSURANCE CLAUSE.—It will be necessary under the proposed form to ascertain the use and occupancy value of the property insured. The form heretofore suggested for this purpose, as applying to the present form, may be used. This information in summary form with values inserted is shown in the following:

Net profits anticipated for 12 months after fire	$100,000
Fixed charges and expenses	100,000
	$200,000
Adequate use and occupancy coverage with a 90% co-insurance requirement	$180,000

In the event of a loss at a time when the use and occupancy value of the property covered was $200,000 (after due consideration was given to the experience of the business before the occurrence and the probable experience thereafter), and the insured was covered up to $180,000, the company could be liable only for the full amount of the actual loss sustained not to exceed $180,000.

Examples illustrating cases employing 80%, 90% and 100% Co-insurance Clauses carrying Adequate and Inadequate Coverage under Proposed Plan

	80% Co-Insurance	90% Co-Insurance	100% Co-Insurance
U. & O. Value for 12 months immediately succeeding occurrence	$200,000	$200,000	$200,000
Total liability which can be assumed by company	160,000	180,000	200,000
ADEQUATE COVERAGE			
Amount of Insurance carried	$160,000	$180,000	$200,000
PARTIAL SUSPENSION:			
Actual loss	72,000	72,000	72,000
Amount of loss collectible	72,000	72,000	72,000
Loss not reimbursed	—	—	—
TOTAL SUSPENSION EXTENDING OVER 12 MONTHS:			
Actual loss	$200,000	$200,000	$200,000
Amount of loss collectible	160,000	180,000	200,000
Amount of loss not reimbursed	$ 40,000	$ 20,000	—
INADEQUATE COVERAGE			
Amount of Insurance carried	$100,000	$100,000	$100,000
PARTIAL SUSPENSION:			
Actual loss	72,000	72,000	72,000
Amount of loss collectible	$^{10}/_{16}$ 45,000	$^{10}/_{18}$ 40,000	$^{1}/_{2}$ 36,000
Amount of loss not reimbursed	$ 27,000	$ 32,000	$ 36,000
TOTAL SUSPENSION EXTENDING OVER 12 MONTHS:			
Actual loss	$200,000	$200,000	$200,000
Amount of loss collectible	100,000	100,000	100,000
Amount of loss not reimbursed	$100,000	$100,000	$100,000

It is estimated that 90% of losses result from partial suspension.

RENT INSURANCE.—Rent insurance is designed to protect a landlord against the **loss of income from rents** which results in the event of a fire. The insured becomes entitled to the actual loss of rentals suffered through the building becoming untenantable, in whole or in part, by reason of a fire, but such loss cannot exceed the amount of insurance stated in the policy. The insured usually agrees to either carry rent insurance equal to 100 per cent of the rents or to have his indemnity reduced proportionately.

Leasehold Interests.—This coverage is also extended to leasehold interests insuring the amount of **rents accruing to the lessee** including any profit made by the lessee in subletting the premises.

Owner of Building on Leased Ground.—The owner of a building set up on leased ground may protect himself against losses of rentals by fire, through rent insurance.

LEASEHOLD INSURANCE.—This form of insurance was intended to protect a lessee against loss in the event of fire, caused by the **cancellation of an advantageous lease,** necessitating the leasing of new premises at a rental in excess of the rental paid on the cancelled lease. It is based upon the unexpired term of the lease and the value of the excess over general rentals for like property in such a location. For example, a 20-year lease is entered into on Jan. 1, 1914, for a building with 200,000 square feet of floor space at a rental of $1 per square foot per year. The same amount of space in the immediate vicinity costs $1.20 per square foot at the end of 1923. On the first day of 1925, the lease having 10 years to run, the lessee would have a leasehold insurance value of $.20 per square foot per year for ten years or as long as rental values in that location remained at the same level, which reduced to yearly value, would be $40,000 per year or a total value for the unexpired term of the lease of $400,000, this value decreasing proportionately as time elapses. At the end of 1924 the value would be $360,000—and so forth.

CONTINGENT LIABILITY INSURANCE.—A contingent liability arising from responsibility for property of others may be protected against loss or damage by fire or sprinkler leakage through contingent liability insurance. The owner of a building in some cases may be liable for loss or damage to property of tenants caused by either of these hazards. Common carriers, whose responsibility for property in the course of transportation continues until delivery is effected, are in most cases liable for loss or damage to property accepted for transportation regardless of the location of the undelivered property at the time of loss or damage.

Life Insurance

Life insurance differs from fire insurance in purpose as well as in principle of indemnity. A life insurance contract is entered into by the insured for the benefit of a third party. The loss insured is not the loss of life but the loss, by reason of death, of the insured's earnings as a source of support or income to the third party beneficiary. The amount of insurance is always basically a sum fixed in advance, which, however, may be paid in various forms.

VALUE OF LIFE INSURANCE IN BUSINESS.—Other forms of insurance such as fire, marine, burglary, etc., have become recognized business necessities, because they provide for reimbursement for losses which may occur in connection with assets. Not until recently has the business world realized that the loss of probably the most important and valuable asset in all businesses was

not insured against. The loss of the ability of important members of business organizations has forced many concerns to close their doors. In most cases the loss of tangible assets may be easily repaired, but the loss of sound business judgment, personality and ability peculiar to a particular business, while it cannot be definitely estimated beforehand, may be vital and in many cases cannot be readily replaced.

The success of many concerns is mainly **dependent upon confidence**—confidence on the part of investors, customers, employees and creditors. The death of an individual controlling a large part of the capital invested in a business, in many cases, has caused its collapse despite the existence of an organization with the necessary ability to conduct the business successfully. Confidence of creditors is shaken and they immediately start action to safeguard their interests. The employees in turn, fearing unemployment, start looking for other apparently more secure positions. Frequently the most efficient men of the organization take this step.

Even though the capital is assured to the business, the viewpoint of those appointed to control the estate of the deceased may be such as to hamper the business. Business insurance on the lives of important officials, whether important on account of their financial holdings or their ability, places in the hands of the remaining members of the organization, exactly when needed, the vitally necessary funds to counteract these detrimental effects. They will then be in a position to settle with the estate, avoiding possible unpleasant interference or, as in the case of loss of ability or judgment, offer proper inducement to replace the lost ability.

Illustration of Operation of Life Insurance in Business.—To illustrate the beneficial operation of life insurance in business, assume a partnership between A and B. A has the necessary capital and B the necessary ability successfully to conduct the business, which will be assumed to have been in successful operation. Both partners carry adequate life insurance payable to the other in the event of death. The premiums are paid from the funds of the concern. The cash or loan value of the policies increases yearly, providing an increasing financial reserve which may be available for use in times of necessity. If A dies, B will receive the insurance and have sufficient to pay A's estate one hundred cents on the dollar, creditors will be assured of the continuation of the business on an even keel, employees of their positions, customers of their deliveries and the fulfillment of contracts. If B dies, A will receive the insurance and have sufficient funds to meet losses which are bound to occur until B's ability can be replaced.

Federal Reserve banks recognizing the value of such protection have incorporated in their loan application blanks a query as to the amount of life insurance carried for the benefit of the business. **Mercantile agencies** include information of this kind in their financial reports.

VALUE OF LIFE INSURANCE AS A SOCIAL FACTOR.—The value of life insurance as a factor of social betterment cannot be overestimated. The gradually increased employment of this medium as a means of eliminating dire want by providing continuation of income or support, has resulted in higher standards of living, education and health among the many families from which the wage earner has been taken by death. As a means of cultivating thoughtfulness, unselfishness and thrift among a great many people, life insurance has been an important factor.

LIFE INSURANCE ORGANIZATIONS.—There are four main types of organizations conducting life insurance as a business, viz:

Stock companies
Mutual companies
Fraternal societies
Industrial companies

Stock Companies.—Corporations formed for the specific purpose of conducting the business of life insurance for profit are termed stock companies. The stockholders provide a sufficient **amount of capital** to get the business under way and guarantee the fulfillment of its contracts in the event of insufficient accumulation from the premiums collected. Stock companies operate either on a strictly stock plan—non-participating—or on a mixed plan—participating and non-participating.

(a) **Non-Participating Plan.**—Stock companies operating under a non-participating plan use the same fundamental basis of arriving at the premiums required, but add only a moderate loading to cover cost of running the business, to meet extraordinary losses and to provide a return on the money invested by the stockholders. **No refund of premiums** due to savings from reduced mortality or economical operation is made to the policy holders.

(b) **Mixed Plan.**—Stock companies operating under a mixed plan will issue policies on the participating as well as the non-participating basis. Policies issued on the participating basis bear a heavier load, resulting in rates which are much higher than those issued on the non-participating basis, because it is expected that **refunds will be made** to the policy holders of a part of the savings effected in such policies.

Mutual Companies.—Companies operating under a mutual plan have no stockholders and if properly conducted are managed **for the benefit of the policy holders** exclusively. Premiums are usually higher than those charged on the stock plan; but refunds are made annually after the policy is in force from 1 to 3 years, according to the operating plan. Any saving due to reduced mortality or economical operation is passed on to the policy holders reducing the ultimate cost of insurance.

Fraternal Societies.—Fraternal societies conduct insurance divisions providing insurance to their members at a low rate. Until recently no legal reserve was carried. They collected from the members a total amount equal to the current mortality costs. As the individual organization grew older so did their members, increasing the average age. The probability of death grew rapidly and many societies had to dissolve, on account of heavy mortality; others either increased their premiums or reduced the benefits. The stronger associations maintained their insurance through aid of new members, on the basis of fraternal relationship, standing by their brothers in time of financial difficulty. However, many of these societies **have adopted the legal reserve plan** on a modified basis and use mortality tables based on the combined experience of various fraternal societies. Several states have recently enacted laws which require that fraternal societies bring their reserves up to an adequate basis within a stipulated period. As there are no agents' commissions to pay and under efficient management expenses are lower than in other forms of organizations, the future possibilities of fraternal insurance are favorable.

Industrial Companies.—Industrial companies came into existence through the recognition of the great need of **insurance among the wage earners** who were unable to pay, at any one time, the premiums required by some of the other forms of organizations. They are regular organizations, conducting business on a sound basis, but under a special system adopted to the character of their service to policy holders. The name "industrial" was adopted, because it was designed for the industrial classes. Several of the large companies conduct industrial departments. Policies are usually issued for small amounts and

the premiums are collected from week to week by agents, rendering a great public service to the large number of wage earners.

WHAT LIFE INSURANCE CAN BE MADE TO DO.—Among the various uses to which life insurance may be put are the following:

1. **Personal:**
   - (a) **For thrift purposes:**
     - To accummulate funds for some specific object or purpose, with the assurance of its attainment or accomplishment, despite disability or death, such as—
       - Education of children, thereby amortizing the cost of education over a period of years.
       - Payment of a mortgage or debt at some definite date, or to guarantee payment in the event of death. To provide a retirement fund from earnings during the productive period.
   - (b) **For family protection:**
     - To provide an income for a dependent at an assured rate of interest higher than generally obtained with an equal degree of safety. The principal payable to other dependents on the demise of the first beneficiary.
     - **To provide funds:**
       - To pay accummulated bills or other debt.
       - To pay funeral expenses.
       - To pay inheritance taxes, thereby avoiding the forced sale of valuable property.
       - To continue salary of the earner in the form of an assured income.
       - To provide a business start or marriage settlement for children.
       - To assure an income in case of disability, providing thereby—
         - The continuance of the earner's salary in the event of disability through illness or accident.
         - Protection of provisions for all arrangements previously listed.
   - (c) **For charity:**
     - To perpetuate charities.
2. **Business:**
   - (a) On **lives of partners or corporate officers,** to provide funds in case of death:
     - To allay misgivings of investors and creditors.
     - To attract and secure needed ability to replace the one lost.
     - To reimburse losses during such replacement.
     - To settle with dependents of deceased partner or officer assuring them of 100 cents to the dollar by avoidance of liquidation and incidentally avoiding undesirable connection and interference with the business.
     - To replace financial support of deceased partner or officer.
   - (b) On **lives of invaluable employees** holding secret processes or possessing skill peculiar to their line, to provide reimbursement for losses which must necessarily occur after their death.
   - (c) On **employees generally:**
     - To provide incentive for co-operation and good will through continuance of salary during disability and continuance of salary to dependents for a definite period after death or a lump sum settlement.
     - To provide pensions.

(d) **On lives of debtors:**
To assure payment of indebtedness.

(e) **On lives of contracting parties:**
To assure compensation in the event of non-fulfillment of contract through death of other party.

LIFE INSURANCE RATES.—Premiums charged by the various types of organizations in this country vary, but the rates are based fundamentally on the same laws of average and mortality tables, with few exceptions, such as those used by fraternal societies, and co-operative associations. The premiums charged are made up as follows:

Natural premium: The **basic rate** used in common by all companies computed from mortality tables and brought to a level basis per annum.

Interest: Interest on premiums computed at a fixed rate compounded annually and used in reduction of the natural premium.

Loading: The estimated amount required annually to **defray expenses,** to **create a reserve** for contingencies, such as epidemics, and in the case of stock companies, a fair **return to stockholders** on their investment.

Premiums charged by **mutual companies** are always higher than those required by stock companies because they include in their loading charge a larger reserve for contingencies, such as epidemics, than do the stock companies. This is done so as not to place the burden of an epidemic or occurrence of any contingency on the policy holders entering in later years. However, **refunds** are made to the policy holders of the excess of such reserves over actual requirements, together with savings through economies and low mortality experience brought about by careful selection of risks. These refunds reduce the final cost of insurance, which cost never includes any profits or interest to stockholders on their investment, as there are no stockholders.

LEGAL RESERVE—DEFINITION.—The legal reserve in insurance is that sum of money set aside under the requirements of the laws of the states, which when increased by future interest and premiums will be **adequate to pay all the outstanding policies** of the company as they mature. The computation of this reserve naturally considers the **rate of interest** used in arriving at the premium. If the interest rate on which the premiums are based is higher, the portion set aside annually to satisfy the legal requirements will be less. This is so because the accumulation of the amount required at maturity would naturally require a smaller annual reserve if interest is computed at a higher rate of compound interest than if computed at a lower rate. Premiums on a 3½% basis should be lower than those on a 3% basis.

This being the case, policies written on a basis of a lower interest rate require the preservation of a larger legal reserve, which is regarded by the state as a trust fund and subject to its close supervision, affording additional security to the policy holders and their beneficiaries. Policy holders in a mutual company receive the benefit of the excess of interest earned over the estimated amount in the refunds made to them.

DISABILITY FEATURE.—The majority of life insurance companies, realizing the need of the insured for protection against permanent disability through illness or accident, introduced a disability feature in connection with their policies. Prior to the addition of the disability feature many policies lapsed through the inability of the insured to pay the premiums because they became disabled and consequently unproductive. Daily expenses were increased by doctor and druggist bills, savings were eaten up, and policies allowed to lapse at a time when they were most needed. Today the disability feature may

be added to the policy by payment of a comparatively small additional premium which provides, under the most generally used plan, the following:

1. Waiver of all premiums payable upon acceptance by the company of proof of total and permanent disability before age 60, and
2. Payment to the insured of a monthly disability annuity of 1% of full amount, starting on acceptance by the company of proof of such disability and continuing so long as disability lasts before maturity of the policy. Disability is considered permanent, in any event, if it continues for a period of over 90 days. Should the insured recover, premium payments are to be resumed and the policy will be continued under its original conditions.

The above payments do not affect the settlement of the policy; that is, they are not deductible.

There are several disability features varying from the above both in regard to rate of disability annuity and period of time required to establish presumably permanent disability.

DOUBLE INDEMNITY.—Within the past 10 years a double indemnity clause has been added by many life insurance companies to supplement the insurance they offer. It is now possible to secure twice the full amount of the policy for the beneficiary if the death of the insured is caused by **some outside accident.**

INSURABLE INTEREST.—As in other forms of insurance insurable interest is required. Insurable interest may arise from many causes but practically all causes are included under **three general classes:**

1. The interest of a person in his own life.
2. The interest arising from "love or affection" through blood relationship or marriage.
3. The interest arising through dependence on the life of the insured for income, pecuniary support or reimbursement.

SELECTION OF POLICIES.—There are a great many types of insurance policies designed to meet the requirements of different persons. Different kinds of policies are prepared not only with regard to financial outlay but also for different objectives and contingencies. By **expert selection or combinations of arrangements** a minimum outlay can be made to provide the most beneficial insurance protection. The differences which appear on comparison of the premiums or deposits required for the various types of policies are not indicative of lower rates or better protection except in providing a particular protection. These premiums are mathematically justified in every case, the premiums in all cases being based on cost.

It is highly important that the type of policy best suited to the circumstance and conditions affecting each individual case be selected. A careful analysis of needs and plans should always be made and a definite purpose assigned to each policy. Through lack of proper forethought, dissipation of funds, intended to provide a competency, has resulted in actual want. Not only should attention be given to the **kind of policy** but also to the **mode of settlement.** Unfair responsibility has been placed on beneficiaries through lack of proper consideration and forethought. Large sums of money have been placed unreservedly at the discretion of persons unaccustomed to financial management resulting in an average dissipation of 90% of all estates over $5,000 in the course of 5 years.

INSURANCE SERVICE.—Service rendered by the various insurance organizations is responsible for the unprecedented expansion of life insurance protection. This service extends during the life of the policy holders and can be continued through the lives of generations without any additional cost and a saving of administration expenses and taxes.

GENERAL TYPES OF POLICIES.—Various types of standard policies and arrangements are given hereinafter showing in each case some of the uses to which they are peculiarly adaptable.

1. Term Insurance.—This type of policy, having no thrift feature, is intended for protection only. It may be likened to fire insurance and is **issued for a specific term of years** not to exceed 20 years. The amount is payable only at death of the insured and ceases with that event, unless conversion privileges are taken advantage of or the policy is allowed to lapse. There are no surrender or loan values available at any time. The premiums are low. This type of policy may be used advantageously in the following cases:

To **protect a mortgage** insuring payment in the event of death.
As **collateral to guarantee payment of loans** or other indebtedness in the event of death.
To **guarantee a default payment** on the non-fulfillment of a contract through death of insured.
To provide adequate insurance for a period until circumstances permit of **conversion into some permanent form of insurance.** This usually can be done without further evidence of insurability, within a stipulated number of years.
To provide **reimbursement of expenditure** made on account of an individual for the attainment of a specific objective which would be lost in the event of his death before its attainment. In this class may be placed the working out of an idea, invention or enterprise.

In most companies when issued with the privilege of **converting** into some permanent form of insurance, it is possible to **date the new policy back** to the date of issue of the term policy, by paying the difference between the permanent-insurance and the term-insurance back premiums with interest. The rates, cash and loan values and refunds (in the case of a mutual company) being the same as those in policies issued at the time the term policy was issued.

2. Single Premium Insurance.—This arrangement is virtually a **prepayment of any form of insurance,** carrying it through to maturity. It is peculiarly adapted to wealthy individuals who wish to provide during prosperous periods protection which cannot be affected by adversity.

3. Ordinary Life.—This form of policy requires the **payment of premiums throughout the life of the assured,** unless a disability feature is incorporated, in which case premiums are waived if permanent disability from illness or accident occurs. This form is most generally used because a larger amount of insurance may be secured for the same financial outlay than any other form of permanent insurance.

4. Limited Payment.—This form of policy provides the same protection as an ordinary life policy. The premiums, however, are **limited to a certain number,** extending from 10 to 30 annual payments. This form is used to confine the payment of premiums to the productive period of life. It has a further advantage of **conversion into an endowment form** at the end of the paid-up period. This privilege is desirable in cases where the protection of dependents ceases to exist. The payment by the insured of the additional premiums would

entitle him to the face value of the policy property. In the mutual companies the insured can allow the refunds to which he is entitled during the payment period to accumulate at compound interest. At the end of this period the accumulation of refunds and interest in most cases would be approximately sufficient to pay the additional premiums necessary to secure the payment of the face amount in cash to himself.

5. **Endowment Policy.**—This is a **form of thrift** providing protection for dependents during its term and payment of the face amount to the insured or his beneficiary at maturity. It is **written for a limited term** which may be from 10 to 30 or more years. It may be used advantageously to accumulate a fund sufficient to defray the future cost of children's education, the amount necessary being guaranteed in the event of the death of the insured or at the end of the term of payments.

6. **Special Forms.**—There are several special forms of life insurance policies which may be combinations of some of the forms previously mentioned with the others or which may provide for the insuring of two or more lives jointly. This latter form of insurance is known as **joint life insurance,** and is paid at the first death.

ANNUITIES.—Annuities guarantee a definite income during the life of annuitant—the person to whom the annuity is payable. The principal classes of annuities are the following: life annuity, deferred annuity, and survivorship annuity.

A life annuity is usually paid for in advance. Annuity payments begin at the end of the first year after purchase and cease at death of the annuitant unless it is combined with a refund or cash refund plan. **The refund plan** stipulates a definite amount which must be paid out regardless of the date of annuitant's death, but must continue so long as the annuitant lives. In the event of the death of the annuitant before the stipulated amount shall have been disbursed, the annuities will be continued to the annuitant's beneficiary until totally disbursed. **The cash refund plan** is the same as the refund plan mentioned above except that the payment of the unabsorbed amount at credit of the policy is paid in a lump sum.

Deferred annuity begins at the end of a stipulated period of years or at the maturity of a life insurance contract.

The **survivorship annuity** is a form of deferred annuity, the payment of the annuity to the beneficiary being deferred until the death of the insured occurs.

Annuities may also be purchased on a due basis in which case the payments begin immediately. Arrangements may be made for payments of annuities in monthly instalments.

GROUP INSURANCE.—This form of insurance is now being extensively used by financial institutions, public utilities, hotels, department stores and a number of industries. It eliminates the necessity of contributions by the employer or other employees when death of an employee occurs. It has proved helpful in solving labor turnover problems, securing the goodwill of employees and their families, and in improving the social conditions among the families of employees.

The following plans of group insurance are among those chiefly used:

1. **A flat sum**—an equal amount of insurance to each employee.
2. **Insurance to the amount of 1 year's salary.**
3. **A service plan**—amounts of insurance based on **length of service.**

Funeral benefits may be added to the amount of insurance granted under any plan.

Illustration of service plans frequently used are given below:

Industrial Plants

$ 500	to employees	6	mos.	and	less	than	1	year	in	service
600	" "	1	year	"	"	"	2	"	"	"
700	" "	2	"	"	"	"	3	"	"	"
800	" "	3	"	"	"	"	4	"	"	"
900	" "	4	"	"	"	"	5	"	"	"
1,000	" "	5	"	"	"	"	6	"	"	"
1,100	" "	6	"	"	"	"	7	"	"	"
1,200	" "	7	"	"	"	"	8	"	"	"
1,300	" "	8	"	"	"	"	9	"	"	"
1,400	" "	9	"	"	"	"	10	"	"	"
1,500	" "	10	"	"	more					

Banks and Clerical Organizations

$1,000	to employees	6	mos.	and	less	than	1	year	in	service
1,500	" "	1	year	"	"	"	2	"	"	"
1,750	" "	2	"	"	"	"	3	"	"	"
2,000	" "	3	"	"	"	"	4	"	"	"
2,250	" "	4	"	"	"	"	5	"	"	"
2,500	" "	5	"	"	more					

Advantages of Group Insurance.—Among the advantages of group insurance may be mentioned a **lower rate** than may be obtained on an individual life, and the **inclusion of risks unacceptable to insurance companies**, which is possible only because the grouping of individuals results in an averaging of age and mortality.

Premiums may be paid entirely by the employer as an expense of the business, which is deductible under the present income tax laws, or they may be paid on the contributory plan, that is, each employee paying a portion of the premium, this portion being deducted from his earnings. In connection with group insurance it is also possible to procure disability benefits and old age pension benefits.

The **standard coverage for disability** provides weekly indemnity for temporary disability resulting from either sickness or accidental injury suffered while not engaged in the duties of regular occupation. House confinement is not required. The full indemnity is paid so long as the employee is wholly and continuously unable to perform the duties of his occupation. There is a limit to these payments, usually 26 or 52 weeks. It does not cover sickness or injuries which do not require treatment by a physician.

The rates differ according to class of occupation. No medical examination is necessary but an inspection is usually made.

LIFE INSURANCE FOR PAYMENT OF TAXES.—Insurance provides the surest means of protecting estates from forced sale of valuable property in order to pay federal and state inheritance taxes and accrued income taxes.

EXEMPTION FROM INHERITANCE TAXES.—An exemption of $40,000 in life insurance is allowed in addition to the $50,000 general exemption from federal inheritance taxes. Most states at the present time exempt from estate transfer taxes insurance payable to beneficiaries.

Marine Insurance

MARINE INSURANCE PRACTICALLY TRANSPORTATION INSURANCE—Marine insurance as conducted at the present time might more cor-

rectly be named "transportation insurance." The policies relating to merchandise as now written usually cover the goods **from shippers' warehouses to consignees' warehouses,** through all the stages of transportation until delivery is effected.

Under the ocean bill of lading the carrier assumes responsibility only for the seaworthiness of the ship both as regards its physical condition and the qualification and number of crew, but he cannot usually be held liable for damage resulting from faults or errors in navigation, or in the management of the vessel, and the ocean bill of lading contains a long list of further exceptions which leaves but few situations in which the carrier can be held liable for damage or loss.

The shipper must therefore seek protection by insurance. The ordinary insurance policy does not insure against all possible risks. The **risks covered** are: the perils of the sea, pirates, thieves, jettison, barratry and other like perils. If protection is desired against pilfering, breakage, and other like perils a **special premium** must be paid. Although there is practically no risk against which it is impossible to insure, the expense is often prohibitive.

Marine insurance provides indemnification only for **intrinsic values** unless it is possible to definitely measure, financially, other values.

UNAVOIDABLE LOSSES COVERED.—A policy of marine insurance is a **personal contract** protecting the person with a legitimate and recognized insurable interest in the object at risk against financial loss resulting from loss of or damage to the insured goods, beyond his control. Such policies did not originally protect the insured against loss from disintegration or depreciation, which was inevitable because of the nature of the goods, its packing or the voyage. Competition, however, has modified this rule. The principle usually adhered to is that marine insurance indemnifies only for losses which are the result of accident or chance.

The insurer does not usually agree to indemnify the insured against losses caused by the negligence of the carrier, whether private or common. Where such losses occur the carrier is legally responsible.

Insurance premiums as well as freight charges are usually **included in the invoices** for goods, both becoming part of the cost of the goods.

ESSENTIAL ELEMENTS OF A MARINE INSURANCE CONTRACT.—In order that a contract of marine insurance may be valid it must possess the following elements:

The legal right of both parties to enter into contracts
Good faith
Subject matter
A risk
Period or term to be covered
Insurable interest
A common understanding of object and conditions
A legal purpose
A consideration

INSURABLE INTEREST.—Insurable interest in property to be covered by marine insurance is possessed by virtue of ownership, financial and/or legal responsibility for its safety or delivery, dependence upon its preservation in good physical condition for the realization of income or profits, which would result from the consummation of transactions directly in such property or for the reimbursement of financial expenditures, or advances made specifically thereon. An owner, consignee, mortgagee, agent, or others whose interests would be directly affected by the happening of any of the perils insured against, would have such an insurable interest.

MARINE INSURANCE COMPANY.—Persons having an interest in ships, cargoes or merchandise subject to marine perils or other transportation risks

may secure the protection which they desire by dealing directly with marine insurance underwriters or by employing brokers. Marine insurance brokers must not be confused with general "insurance brokers." Unless a broker deals specifically in marine insurance and is competent in that line, it is safer for the prospective insurer to deal directly with the underwriter or insurance company. The broker acts as agent of the insured, but is compensated by the underwriter. As agent, he should conserve the interests of his principal (the insured) in any way that he may fairly do so.

QUALIFICATION OF A MARINE INSURANCE BROKER.—In no branch of insurance do the qualifications of the broker play such an important part as in marine insurance. He not only serves the insurer but is and has been the means of broadening the scope of coverage and improving the economic value of marine insurance by guarding the stability of the underwriter through not seeking a degree of coverage, which, while serving his client, would result detrimentally to the institution of marine insurance.

An efficient broker will have an intimate knowledge of the following in so far as they relate to marine insurance.

1. The law of contracts.
2. International law as affecting marine transportation.
3. The principles of insurance.
4. Modern insurance practice.
5. The various underwriters, what they will undertake and their rates.
6. Conditions of transportation facilities at all points and the most advantageous routes.
7. The necessary packing requirements.
8. The principles of loss adjustment.

MARINE INSURANCE ORGANIZATIONS.—The types of organizations underwriting marine insurance are as follows: stock companies, mutual companies, and Lloyds associations. These types of organizations have been discussed under fire insurance.

PROCEDURE.—An application for marine insurance must be made. This may be done either by the insured or his broker, on forms provided with the spaces for information covering the following:

Name of assured	Number of packages
On whose behalf insurance is desired	Amount of insurance desired
To whom possible losses are to be paid	Name of carrying vessel
Kind of goods	Points of shipment and destination
	Approximate date of sailing of vessel

The application is submitted to the underwriter, who considers the information given and either names a rate and states conditions under which he will insure the risk; or if either party desires further time to consider the rates and conditions, the application is considered as an "inquiry" or rate quotation, allowing a limited time for acceptance. If accepted and either signed or initialed by both parties, the policy is then written.

TYPES OF POLICIES.—There are various types of policies used in effecting insurance of marine and transportation risks. The principal types discussed in the following are classified according to the subject of insurance.

Vessel Policies.—Vessel policies in their various forms constitute what is known as **hull insurance.** Some of these policies are general, applying to all types of hull risks, others are specific, limiting their coverage to certain types,

such as steamers, sailing vessels with or without auxiliary power, vessels under construction or being repaired.

Cargo Policies.—Cargo policies may be divided into three main classes: (1) **Special policies** covering individual risks and certain commodities; (2) **floating policies** which are open contracts; and (3) **blanket and transit floaters.**

Freight Policies.—Freight policies **cover the freight charged** for transporting the cargo, or the cost of chartering or hiring a vessel or the value by which the merchandise is increased through addition of the cost of transportation.

Profit and Commission Policies.—Policies covering profits and commissions which are added to the values of the cargoes, the valuation of which for insurance purposes includes these additions.

Liability of Common Carriers.—The insurable interest is the liability assumed by the common carrier. A special form of policy is used for this type of insurance.

INTERPRETATION OF THE POLICY.—As the marine insurance policy reads today, it does not disclose a great difference from those issued more than 300 years ago. Its language, to the uninitiated, is odd, every word in the basic form has been given great study and judicial thought. Some of the language is obsolete and somewhat confusing to the ordinary layman. It is made up of printed, written and stamped words.

The **printed part** sets forth conditions and stipulations common to all marine policies. The **written and stamped parts** are the ones which indicate special arrangement or consideration. Where any doubt or conflict arises, the printed part usually overrules or controls the written and stamped part. The meaning of the printed part of the policy has been well established, but the other parts are subject to the degree of mutual understanding between the contracting parties and the degree of clarity in the expression of such understanding. It is, therefore, inadvisable for one not thoroughly familiar with marine insurance practice to attempt to secure what to him seems like additional protection by insisting on a special clause of his own construction. Such action may result in the invalidation of terms, printed or implied, and consequent diminution of his protection. Interpretation of technical words is **governed by usage** unless it was obviously the intention of either of the parties to overrule the common usage.

VALUED AND UNVALUED POLICIES.—A **valued policy** is one in which the insured value is stated. This value usually includes **freight and insurance charges** and an additional per cent to cover **expected profits.** An unvalued policy is one in which no stated value appears and the value must, therefore, be subsequently ascertained and proved.

WHEN MARINE INSURANCE BECOMES OPERATIVE.—In the policy will be mentioned the place or time from which protection will become effective and at what place or time protection will terminate. The contract may read "immediately following the loading on board," or "including risk of craft, raft, and/or lighter to and from vessel," or a "warehouse to warehouse" clause may be inserted by which the protection extends from the moment the goods leave the exporter's warehouse until the moment they are delivered in the warehouse of the purchaser. The insured must make certain that he is receiving the protection that he requires.

Trade customs of selling and financing are reflected in marine insurance policies. Cotton is protected by the policy from the time the cotton is ginned,

while grain sold ordinarily at the port is usually not covered until the grain is aboard the vessel.

POLICIES "TO WHOM IT MAY CONCERN."—Marine insurance policies are sometimes written "For Account of Whom it May Concern." The expression is not as broad as a literal construction would indicate. It is a technical term which **presupposes an agency,** referring only to a person or persons whom the agents had in mind when the insurance was secured. This term is intended to conceal the identity of the real party. Wishing to keep his enterprises secret, he authorizes the agent to represent him and finally adopts the interest so represented.

THE PREMIUM.—The marine insurance business is highly competitive, but differences between rates quoted by various companies are slight, if any. The amount of the premium on a particular policy is obtained by multiplying the rate which appears in the margin of the policy by the sum insured. Special risks, not covered in the standard policy require additional premium.

The basic rate in American policies is always indicated in percentages. **In English policies** 100 pounds is taken as a basis and rates will read £2 per cent, £3 per cent; or smaller rates will read so many shillings or pence per cent always meaning per hundred pound sterling in sound value.

Legally no contract exists unless not only a meeting of minds has taken place but also a consideration has changed hands, or arisen in some other way. Ordinarily the policy contains a clause declaring the consideration to be received, but many policies contain a clause indicating that the insured has bound himself to pay the premium. The latter policy has become general since it is not always practicable and often impossible to insist upon prepayment.

Rate of Premium Governed by Character of Carrier.—The rate to be paid is influenced by the character of the carrier. Well known vessels of recognized steamship lines are covered by rates governed by the current market rate. **"Outside" risks,** such as shipment by tramps and other carriers below the liner standard, are covered by rates determined in individual cases, on the basis of the type of vessel, the destination and duration of the voyage, and the character of the goods.

Rate of Premium Effected by Exceptional Circumstances.—Exceptional circumstances, such as war or revolution, will increase the rates, and they may also rise in individual instances because of the fact that insurers are usually unwilling to bear too large a share in the risk of any one vessel, and the distribution of the risk over several companies may not always be accomplished.

INSURANCE ON "UNDER" AND "ON DECK" CARGOES.—A distinction is made between "under" and "on deck" cargoes. "On deck" cargo is not covered unless specifically mentioned as being on deck, or unless such cargo is customarily stowed wholly or in part above deck.

THE LIMITING TERM OF POLICY.—There are blank spaces in the policy form providing for the geographical or time limits of the policy known as the **"termini."** The place or time of inception of risk is known as the **"terminus a quo"**; the place or time of the termination of the risk the **"terminus ad quem."** The omission of the "termini" of the insurance invalidates the policy. The "terminus a quo" must be specifically mentioned, but the "terminus ad quem" may be subject to determination, as in the case of a policy which may be terminated by either party giving notice of cancellation in writing to the other. In such a policy, however, the geographical termini are definitely stated as in a **"floating policy."**

DEVIATION.—The policy provides "that it shall and may be lawful for the said vessel, in her voyage, to proceed and sail to, touch and stay at, any ports or places, if thereunto obliged by stress of weather or other unavoidable accident, without prejudice to this insurance." If this clause were not inserted in the policy, the captain or master of the vessel, realizing that insurance would be voided if he were compelled to deviate from the course in order to avoid a peril, might delay in seeking refuge until too late. However, in each case the facts must prove the necessity for any deviation.

"LOST OR NOT LOST".—The expression "lost or not lost" appearing in a policy of marine insurance may seem contradictory to the spirit of the contract. However, the conditions under which marine insurance is written make it a necessary phrase. To illustrate, an importer of goods from a distant point has experienced considerable delay in obtaining the necessary information to effect coverage. He insures the goods in the belief that it is safe, but it might have become lost before the coverage is effected. Unless the phrase appears in the policy he will not be able to collect under the law of contracts. With the phrase included, however, he will be indemnified, provided that the goods were lost "without the knowledge of either party to the contract."

PERILS COVERED.—The perils covered are:

1. Perils of the Sea.—This does not include all perils "on the sea" but "of the sea," such as unusual action of natural forces operating in or around navigable waters; collision with other ships or objects but not those caused by negligence resulting in loss to other parties; stranding; springing a leak as a consequence of bad weather; damage by lightning; disappearance.

2. Fire Peril.—Covering the usual fire hazards.

3. Jettison.—Jettison consists of a peril on the sea, defined by Philips (Section 1278,) as "the throwing overboard of part of the cargo, or any article on board of a ship, or the cutting away of masts, spars, riggings, sails or other furniture for the purpose of lightening or relieving the ship in case of necessity or emergency.

4. Barratry.—This is wilful misconduct of the master of a ship or his crew in their characters as such, including every dishonest breach of trust which would injure the owner of ship, or cargo, committed without his consent.

5. Theft and Pilferage.—Theft is considered as robbery committed by attacking thieves. Pilferage is robbery by stealth. Petty thievery is not usually covered.

Pilferage has of recent years become a **serious cause of loss.** It is claimed that because of the practice of shippers to accept "**released**" **bills of lading,** i.e., bills of lading in which the liability of the carrier is limited or "released" from most of the liability adhering to the "**full**" **bill of lading,** the carrier has grown less careful in giving the goods the necessary protection. Insurance against pilferage has become more needed, but at the same time the insurance companies have been forced to limit their risk. The English underwriters adopted a clause in 1920 limiting their liability on account of pilferage to 75% of the value of the goods so lost, and the American companies have adopted the same ruling. The shipper must consequently do his share to prevent theft and pilferage by the adoption of pilferage-proof packing. The additional cost of this coverage will often be more than is justified by the losses arising from pilferage.

LAWLESS ACTS.—Overt acts committed by persons not connected with the venture from either personal or national motives are generally considered lawless acts.

AVERAGE CLAUSE.—The average clause was intended to relieve the underwriters of the expense and annoyance of adjusting insignificant claims. Its use results in a lower rate to the insured because the necessity of adjusting petty claims is eliminated. The average loss percentage commonly used in American policies is 5%, and in English policies 3%. However, in order to secure lower rate of insurance, a merchant may decide to assume a greater percentage of the loss, sometimes as high as 20% or 50%.

GENERAL AVERAGE LOSS.—A general average loss arises out of a reasonable and justifiable sacrifice made by the master of a ship under stress of accidental circumstances, of a portion of a ship or its cargo, in order to prevent greater damage or loss of the whole venture. It may also include the voluntary incurrence of a reasonable amount of expense for the sole purpose of protecting or preserving the common interest of all concerned in the threatened danger.

In such events all parties interested in the adventure pay a proportionate share in the loss, including the one whose interest was sacrificed to prevent the greater loss. Unless satisfactory bond is produced the goods will be held as security until payment of the assessment to be made on completion of the adjustment. Usually the insured can avoid making payments by the insurance company guaranteeing the payment of all charges to the adjusters.

PARTICULAR AVERAGE LOSSES.—A particular average loss is one suffered by a particular interest arising from accidental damage caused by the perils insured aganist. Such a loss is not usually protected unless written under special coverage such as "W. A." (with average) or A. A. R. (against all risks.) Without such special coverage it is usual that unless the damage exceeds a stated percentage (called "franchise") of the value, varying between 2 and 20% the loss must be borne wholly by the insured. If the damage exceeds the stated percentage, the loss is paid in full by the underwriters.

F. P. A. INSURANCE POLICY.—The F. P. A. policy (**free from particular average**) on the other hand does not protect against particular average. The interpretation of the F. P. A. clause is somewhat different according to the American and the English practice.

F. P. A. A. C. Insurance Policy.—The F. P. A. A. C. (**free from particular average American condition**) clause still holds the insurer responsible for particular average "caused by stranding, sinking, burning, or collision with other vessels."

F. P. A. E. C. Insurance Policy.—Under the F. P. A. E. C. (**free from particular average English condition**) clause which reads "unless the vessel or craft be stranded, burnt or in collision," the insurer is liable for partial damage when the events have occurred although the accident cannot be considered the immediate or proximate cause of the damage.

TOTAL LOSS OF A PART.—The total loss of a part of a shipment which consists of various units, is **not a particular average loss.** For example, where a shipment consists of 100 bales of cotton and one is destroyed by fire, particular average cannot be applied, because it is the loss of an integral part of the whole; but if one or more bales should be partially damaged, then particular average would become operative.

RIGHT OF ABANDONMENT AND PARTICULAR AVERAGE.—Where the particular average attains a percentage of the total value which would warrant the exercise by the assured of the right of abandonment, he may elect to do so, thereby converting a particular average into a constructive total loss. In such cases the assured must tender abandonment to the underwriter for his

acceptance. If the underwriter accepts the abandonment, he may elect to take possession of the remnants of the property and pay the insured the full insured value, but his acceptance does not compel him to accept the ownership of the property.

LOSS ADJUSTMENT.—The adjustment of marine insurance losses by the underwriter requires the most intimate knowledge of marine insurance practices and in addition a keen sense of justice, tempered by an appreciation of the ultimate effect of adjustments on marine insurance as an institution.

THE COLLECTION OF LOSSES.—Ordinarily a policy contains a clause by which it is made payable to the insured or order. In case of shipments **under letters of credit** the policy may be made **payable to the issuing bank.** The certificate issued under an open policy is made payable to a designated person or order and may be transferred by endorsement like any other negotiable instrument. The loss may be made payable in the country of the purchaser of the goods.

The underwriters usually maintain balances in the largest foreign commercial centers. The local representative of the underwriters may, after adjustment, make the proper payments, thereby making it unnecessary for the consignee to wait until the certificate or policy has been returned to the United States and funds have been forwarded.

THE "LOSS ORDER."—After adjustment has been made and the underwriter has agreed to make settlement, the holder of the certificate may issue a "loss order" whereby the underwriter is instructed to make **payment to a third person.** Where the certificate is held by a bank this procedure is often followed.

DOCUMENTS REQUIRED ON PRESENTING CLAIM FOR LOSSES.—The documents which are required when presenting claims differ in each instance, but the underwriter will usually require—the insurance policy, the bill of lading, the invoice, a statement of the market value of sound goods at destination, and adequate proof of the amount and the source of the loss. The latter will usually be prepared after a survey by an agent of the company, a Lloyds agent or some commercial body of recognized standing.

Often claims against insurance companies prove uncollectible because the insured neglected to have the damage ascertained at the proper time and by the proper persons, and because he failed to notify the insurer promptly of the loss incurred.

TOTAL LOSS.—A total loss is one in which the subject insured is destroyed, is taken out of the possession or control of the owner, or so injured as to be of insignificant or no practical value to the assured for the purposes and uses for which intended.

CONSTRUCTIVE TOTAL LOSS.—A constructive total loss is one in which the subject insured, while not becoming a total loss, has nevertheless been injured to such an extent that the remaining parts either could not be repaired at a cost less than the full value when so repaired, or if not badly damaged, is in such a position that the cost of recovery would equal or exceed its value when recovered or salvaged. It is possible by agreement or implication of law to fix a percentage of the value beyond which the loss will be considered a technical or constructive total loss. In the United States the rule has been in force which provides that in the event of a vessel being so damaged that the cost of salvage and repair will exceed 50% of the salvaged and repaired value, the assured may claim a constructive total loss.

Miscellaneous Insurance

LIABILITY AND COMPENSATION INSURANCE.—These two forms of insurance are co-related. Both provide for indemnification of losses to employers which may occur by reason of court decisions or operations of state laws for **compensation for injury or disease to employees** as a result of their occupation. Liability insurance was designed mainly for the indemnification of employers, while compensation insurance was fundamentally designed to provide support for employees. The operation of compensation insurance is generally supervised by the various states which have enacted laws with this purpose in view.

Compensation Insurance Compulsory in Some States.—In some states compensation insurance by employers is compulsory. In several states where compensation laws have been enacted the acceptance of the compensation principle by employers is voluntary, except for certain hazardous occupations where it is compulsory. However, where acceptance of the principle is voluntary, failure to accept on the part of employers usually proves detrimental to their interest. Because by their failure to accept, they elect to exchange the liability to be sued for damages specified under the compensation law for a liability to be sued for damages under the general laws.

Compensation Insurance Organizations.—There are **four general types** of organizations conducting compensation insurance, viz.: stock companies, mutual companies, reciprocals, and state funds.

Stock companies, mutual companies and reciprocals are organized and conducted on the same general principles described in connection with fire and life insurance.

State funds are mutual types of insurance created and partially financed at the start by the several states, which also manage this form of insurance. Part of the expenses are sometimes met by the states and in some states there is an immunity from taxation granted to the participants.

Wherever the state laws provide the insurers in state funds relief from all liability for payments of compensations, the employers get absolute security. There is an exception, however, in those cases where through legal technicalities the injured employees may sue employers. Liability for losses ensuing in such cases are usually neither considered nor covered by the insurance.

Self-insurance may also be carried by the employers, but this form does not properly protect the interest of employees. In the event of a catastrophe or severe losses the claims may be large enough to bring about insolvency of employers.

Compensation Insurance Premiums.—Premiums are computed **on the basis of each $100 of actual payroll,** classified according to the occupations of the various groups of employees if they do not come under a general group for the particular class of business. A specific rate for each group is stated in the policy. As the actual payroll cannot be known until the end of the policy term, an estimate is made by the insured and used in computing the initial premium to be paid. At the end of the period, the payroll is audited by the insurance company's auditor and a refund made to the insured if the premium as computed on the basis of the actual payroll is less than the initial premium, or the insured is called upon to pay an additional premium if it is more.

Injuries Covered by Compensation Laws.—The compensation laws of different states define injuries covered. Although this definition differs in the various states, the following definition is most common:

". . . disability or death resulting from an accidental personal injury sus-

tained by the employee arising out of and in the course of his employment, except when the injury is occasioned by the wilful intention of the injured employee or where the injury results solely from intoxication."

In some states accidents in the course of employment are covered, whether arising from that employment or not. In a few states industrial diseases are covered.

Elimination of Trivial Injuries.—Usually there is a provision requiring that the loss of time resulting from an injury must amount to at least 2 weeks before compensation starts. This is known as a **"waiting period."** In some states compensation dates from the day injury occurred.

ACCIDENT AND HEALTH INSURANCE.—Accident and health insurance provides for the payment of a weekly income to the insured in the event of physical incapacity caused by illness or accident, and a death benefit in case of death by accident. Compensation insurance covers accidents which occur while employees are engaged in the performance of the duties of their employment, but a great many accidents which occur cannot be so classified. Furthermore, sickness which cannot be attributed to occupational causes far exceeds the losses occasioned purely through accident.

Indemnity offered by compensation insurance is limited, and in some states no provisions are made for "occupational diseases." Sickness and accidental injury cause much suffering and poverty to persons so incapacitated and to their dependents. Accident and health insurance is a step to relieve this condition.

Recently, however, life insurance policies have added a disability clause which provides an income and a waiver of premiums in cases of permanent or presumably permanent disability without diminution of the face amount of the policy. The monthly indemnity in each case being a fixed amount per $1,000 of insurance carried. Additional disability indemnity if required can be secured through either health and accident insurance or non-cancellable income policies. Accident and health policies are written with a clause reserving for the company the **right of cancellation,** even during the policy term, which is usually one year. However, such cancellation does not prejudice any claim originating prior to the end of the policy term. The company may also refuse to renew the policy when it expires.

ACCIDENT INSURANCE.—Accident insurance provides **weekly indemnity** and death benefits only in case of accidents. The general types of policies issued are ticket, limited and unlimited policies.

Ticket Accident Policies.—These are policies which may be secured at the ticket offices of railroad stations, providing for payment of specific amounts in the event of death within specified periods of a day, week, 30 days, or 90 days. Such policies do not cover disappearances or injuries where there is no visible wound, and eliminates most of the causes of accidents most likely to occur. Features are introduced in this type of policy which provide disability income and double indemnity if death should occur on account of a specified list of accidents within a period of ninety days from time of injury.

Limited Policies.—These policies cover accident or sickness due to **specific causes** named in the contract. In some cases these policies stipulate the manner in which the accidents must happen.

Unlimited or General Policies.—As the name implies, these policies are not limited to a few causes and are more or less general. However, there is a considerable variation in the coverage offered by policies of this type. Most

of them provide for a death benefit of a specific sum, which is the basis of all other benefits payable under the policy. Some provide for doubling the benefits, others tripling and even quadrupling them if the accident occurs on a common carrier.

AUTOMOBILE INSURANCE.—A combination of **five types of insurance** is needed to provide complete protection to the owner of an automobile. These are liability, property damage, collision, fire, and theft insurance. Complete protection may be had under one policy in some states and/or under separate policies in other states.

The Liability Policy.—This type of policy provides insurance against legal liability "for damages on account of bodily injuries sustained by any person or persons other than the owner or his employees engaged in operating or caring for the automobile, as a result of the ownership, maintenance or use of the automobile covered." The policy usually promises to defend the insured in suits, pay legal costs, make investigations and settlements of claims and pay for imperative and immediate surgical relief to the injured in a total amount not to exceed the amount stipulated in the policy. Only the ordinary use of an automobile is contemplated. Therefore, the scope of the protection is limited to ordinary use, unless otherwise specifically covered.

Liability policies are issued to cover various uses, each class bearing its own specific rate. A policy covering a private passenger car does not insure the car while it is being used in carrying passengers for hire, nor while towing a trailer, or engaged in speed contests or races. The company's liability is limited to the amount stipulated in the policy. The **usual standard limits** are $5,000 for injuries to any one person in one accident and $10,000 for injuries to more than one person in one accident, subject to $5,000 per person limitation.

Property Damage Policy.—This policy provides for payment of damages resulting from **injury or destruction of the property of others** not carried in the car covered by the policy or in charge of the assured or his employees, and resulting from an accident arising out of its ownership, maintenance or use. The coverage includes the loss of use of the property damaged or destroyed. The liability of the company is limited to the amount stipulated in the policy.

Rates for Liability and Property Damages.—The rates for liability and property damage insurance depend upon the following:

1. **Territory**—Divided on the basis of degree of hazard, from the most hazardous community to the rural districts, density of population and past experience being the principal factors.
2. **Type of car**—
   (a) **Private passenger car** for personal use or business calls.
   (b) **Public automobiles**—
      Livery—hired by the day or hour.
      Other than livery—taxicabs.
   (c) **Commercial cars**—delivery cars and trucks.
   (d) **Manufacturers' and dealers' cars**—for demonstration purposes.
3. **Motive power**—
   (a) Electrically driven.
   (b) Motor driven.
4. **List price**—
   Grouped according to list price influenced by the insurer's experience with the type of car to be insured.

5. **Driver of automobile**—
   If driven only by owner, a reduction may be secured.

Collision Policy.—A collision policy provides for payment of losses sustained by collision of the automobile with a moving or stationary object. It covers **damages to the owner's car,** computed on a basis of the actual intrinsic value at the time of loss or the cost of repair or replacement.

Collision rates depend upon the following factors: type of car—same classifications as liability policy, list price, age of car, and motive power.

Fire Insurance Policy.—A fire insurance policy on automobiles provides indemnification for loss or damage to the automobile insured caused by **fire or transportation perils. Two types of policies** are issued, viz.:

1. **Valued**—The value of the automobile is agreed upon in advance
2. **Non-valued**—The value determined at time of loss.

Fire insurance rates consider construction of the car and protective devices carried. Contingencies other than fire and transportation perils may be insured against by payment of an additional premium.

Theft Insurance.—Theft insurance is usually written by an endorsement on the fire insurance policy and covers theft of owner's car. Such insurance does not cover contents of a car but is limited to the automobile and such parts as are physically attached and made part of the car.

RIOT, CIVIL COMMOTION AND EXPLOSION INSURANCE.—This form of insurance indemnifies the insured against loss caused by riot, insurrection, civil commotion (including strikes), and explosion caused by conditions foreign to the operations conducted by the insured. This class of insurance is written to cover buildings and/or contents. Use and occupancy coverage may also be obtained in connection with this type of insurance.

EARTHQUAKE INSURANCE.—This form of insurance provides indemnification of losses caused by earthquakes.

WIND STORM INSURANCE.—This class of insurance indemnifies the insured against losses caused by the elements at the time of high wind and directly by extraordinary wind conditions. It usually excludes direct damage caused by hail, lightning, flood and rain.

HAIL INSURANCE.—This provides indemnification against loss caused directly by hail, and is usually written with **a 50% co-insurance clause.**

FLOOD INSURANCE.—This indemnifies the insured against losses caused by flood, overflowing of rivers and/or tidal waves, or may be extended to include losses caused by bursting of reservoirs, dams or other artificial mediums of impounding water.

RAIN INSURANCE.—Rain insurance provides indemnification for losses caused by rain. It is used to relieve losses caused by the effect of rain on some project such as special sales, scientific observations, public contests, etc. A **specific number of time units** are usually covered, and the **measure of rainfall,** necessary to prove that damage has been suffered is definitely stated in the policy.

PLATE-GLASS INSURANCE.—This class of insurance provides indemnification against loss caused by breakage of plate-glass windows. This is mainly **a replacement insurance.** Loss is based on value of the glass at time of loss. Insurance companies usually have a supply of glass conveniently located and they consider salvage in their adjustment of loss.

REAL ESTATE TITLE INSURANCE.—Real estate title insurance provides protection against financial loss resulting from claims arising out of existent **defects in the title** to real property, which defects were undisclosed at the time protection was secured. It is a comparatively new type of insurance and has become a very important factor in financial operations relating to real property particularly in cities. Prior to its advent examination of titles was accomplished by individual lawyers who examined or had examined the records and furnished **an abstract.** In order to be complete, the examination should consist of a true history of the property from the original grant by the state to the time the abstract is made. It involves examination of records containing copies of deeds, mortgages, etc., records of wills, administration, partition, taxes, lawsuits and all kinds of incumbrances, and must consider the validity of deeds and correctness of records. At present such work is done by **title insurance corporations,** who build at an enormous cost an "abstract plant" to do title searching of the property in the district in which the corporation operates.

In view of the nature of the work undertaken and the financial responsibility and liability assumed by title insurance companies, they should be backed by adequate resources in order to fulfil their guaranties.

Types of Policies.—There are **two principal types** of policies: owner's risk policy, and mortgagee's risk policy. But several forms of contracts are entered into covering special phases.

General Provisions of Owner's Policy.—Usually the policy provides for the following:

1. **Defense of insured against suit** founded on claim of title or incumbrance existing prior to date of policy.
2. Conditions under which loss must arise, which are stipulated in the policy.
3. **Voidance** in case of misstatement or suppression of fact by the insured or his agent.
4. **Non-assignment of policy** except by special permission of the company.
5. **Reduction of premium on new policy** is assured if and when the holder of a policy, within 7 years from date of policy, shall sell or mortgage a part or all of the property and shall apply for a new policy within 30 days of such sale to be issued to the grantee or mortgagee. The former policy must be surrendered and cancelled.
6. **Adjustment of losses.** Conditions of settlement are clearly stipulated in the policy.
7. **Subrogation rights** are reserved by the company.

General Provisions of Mortgagee's Policy.—Usually the policy provides for the following:

1. **Payment of interest** on the mortgage when it becomes due.
2. **Payment of principal** of the mortgage within 12 months after it becomes due.
3. **Continuation of policy** on any extension of the mortgage with consent of the company.
4. The conduct of all actions or proceedings deemed necessary by the company or the **defense of any action** brought against the insured without any expense to the insured.

CREDIT INSURANCE.—Credit insurance is protection against excessive financial loss incident to the failure of those to whom credit is extended to meet their obligations to the insured.

Credit insurance is in effect a means of spreading the losses caused by business reverses of a few over many and furnishes a factor of stability in the credit system which system is the backbone of finance. It promotes careful selection and prudent limitation of credit risks because it requires the use of **recognized rating services and limits the amount of credit to individuals.** It furnishes a collection service for policy holders conducted for the protection of both company and policy holders. Credit insurance does not ordinarily cover **normal losses.** Its use and the creation of a proper reserve for bad and doubtful accounts based on experience should eliminate unexpected losses.

Types of Policies.—There are several types of credit insurance policies being written, but the two most generally used are the "limited" and "unlimited" types.

The "limited" policy limits the total liability of the insurer company. This type of policy usually provides for indemnification against financial loss occurring within the term of the policy and resulting from bona fide sales of merchandise shipped and delivered in the usual course of business. The provisions for an **adjustment of losses** within a specified period after the termination of the policy (or a rider can be obtained providing for interim settlements) include the following:

"From the gross loss covered and proven, shall be deducted—

(a) All discounts to which the debtor would have been entitled, had the debts been paid at the date of insolvency.

(b) All amounts collected thereon and all amounts which may have been obtained from any other source.

(c) The amount of goods returned or replevined, when such goods are in the undisputed possession of the indemnified.

(d) All amounts mutually agreed upon as thereafter obtainable.

"From the net result of the above computations shall be deducted 10 per cent as co-insurance and an agreed normal loss of the percentage stipulated to be borne by the indemnified, upon the total gross sales made during the term of the policy. The normal loss deduction shall not be less than an amount stipulated in the policy."

The "unlimited" policy differs from the "limited" policy in the following respects:

It requires that the accounts shall have been placed with the company for collection before they are more than 75 days past due under the original terms of sale, providing that no account be filed with the company after a date specified in the policy.

The 10% **co-insurance deduction** is made from the gross amount of the loss before deductions stipulated in the "limited" policy referred to above as (a), (b), (c) and (d).

The requirement for **normal loss deduction** is usually the same as that stipulated in the limited policy.

Another provision incorporated in both types of policies is that "if the indebtedness of the debtor to the indemnified at the time of insolvency is not fully covered, then the deduction shall be made pro rata, i.e., in the ratio which the amount covers bears to the whole of such indebtedness." The coverage in each individual account being based on the maximum coverage according to the rating, any excess of such maximum is not covered. However, if the amounts realized after the settlement by the company with the indemnified, exceeds the amount on which the loss was computed, the company refunds such excess to the indemnified.

Termination.—The "limited" policy provides that "if during the term of this bond, the indemnified shall become insolvent, or shall cease to continue business as heretofore carried on, or shall go into liquidation, or being a partnership shall be dissolved, then this bond shall immediately terminate and if any claim for excess loss is made, a **'Final Statement of Claim'** shall be filed by, and an adjustment shall be made with the indemnified in the same time and manner as if this bond had originally by its terms been made to expire at the date of such termination. Temporary interruption by fire or strike, or the death or withdrawal or admission of a member of a partnership composed of more than two members, shall not be considered a discontinuance or dissolution."

The "unlimited" policy makes the same provisions for termination as the "limited" policy, but in addition it provides for termination by a written notice of 10 days given by either party to the other and a proper adjustment of premium.

Special coverages of inferior ratings, interim adjustments of claims, etc., may be secured. They are usually added to the policy in the form of riders or endorsements.

REGISTERED MAIL AND EXPRESS INSURANCE.—Banks, bankers, investment companies and others who send, by registered mail or express, monies, bonds, stocks and other valuables can secure for themselves or their clients indemnification against loss from all risks except risks of war and loss by theft committed by employees of the assured or of persons to whom or by whom the property was mailed or expressed.

An open policy is generally used. The insured is supplied with notification of shipments blanks on which shipments of each day are listed at a declared value which should never be greater than 2% above the market value.

Registered Mail Insurance Rates.—Rates charged for the coverage under such policies by a prominent insurance company are as shown in the following table.

Tariff of Premiums on Each $1,000 Insured per Registered Mail between Post Offices in the States Mentioned and New York City

The rate placed opposite a state includes all post offices on a railroad, except those to which a different rate is specified and those involving carriage by stage, for which an additional charge is made, proportionate to the extra risk incurred. The minimum premium on any one risk is 1 cent.

	Securities	Currency
Alabama	10	15
Birmingham	5	10
Arizona	15	22
Arkansas	10	15
Little Rock	8	12
California	14	20
Los Angeles, San Francisco	11	17
Colorado	15	24
Denver, Colorado Spr.	9	14
Connecticut	5	10
Delaware	5	10
Dis. Columbia	5	10
Florida	10	15
Jacksonville	5	10
Georgia	7	11
Atlanta	5	10
Idaho	15	22
Boise	14	20
Illinois	5	10
Chicago	5	10
Indiana	5	10
Indianapolis	5	10
Iowa	10	15
Des Moines	8	12
Kansas	12	15
Kansas City	7	10
Kentucky	7	10
Louisville	5	10
Louisiana	10	15
New Orleans	8	12
Maine	5	10
Portland	5	10
Maryland, Baltimore, Massachusetts, Boston	5	10
Michigan	7	10
Detroit	5	10
Grand Rapids	5	10

	Securities	Currency
Minnesota	8	12
Minneapolis	5	10
St. Paul	5	10
Mississippi	10	15
Jackson	8	12
Missouri	10	15
Kansas City	7	10
St. Louis	5	10
Montana	15	22
Butte	14	20
Nebraska	12	15
Omaha	8	12
Nevada	15	22
New Hampshire	5	10
New Jersey	5	10
New Mexico	15	22
New York	5	10
New York City	5	10
North Carolina	6	10
Wilmington	5	10
North Dakota	12	15
Ohio	5	10
Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo	5	10
Oklahoma	12	15
Oklahoma City	8	12
Oregon	17	25
Portland	12	20
Pennsylvania	5	10
Pittsburgh	5	10
Philadelphia	5	10
Rhode Island	5	10
South Carolina	7	10
Charleston	5	10
South Dakota	12	15
Tennessee	7	10
Memphis	5	10
Nashville	5	10
Texas	10	15
Utah	15	22
Salt Lake City	12	15
Vermont	5	10
Virginia	5	10
Richmond	5	10
Washington	17	25
Seattle	12	15
Tacoma	12	15
West Virginia	5	10
Wheeling	5	10
Wisconsin	7	10
Milwaukee	5	10
Wyoming	15	22
Canada		
Montreal, Quebec, Toronto, Hamilton, Ottawa	5	10
Winnipeg	8	15
Vancouver	19	20

Air Mail.—Shipments by "air mail" may be covered under this policy, the rates on such shipment being **double those for registered mail.** The principal conditions to which the coverage is subject are as follows:

1. That risks hereunder shall attach only upon notification of the amount or value mailed or expressed by or to the Assured being given to the Agents of this Company in .....; said notification to be given prior to known loss, by messenger, telegram, or mail, on the day of mailing and registration or expressing of the package insured.

2. It is warranted that the contents of each package insured under this policy shall be enclosed in a strong wrapper, envelope, or canvas sack, well secured, and in all cases sealed with wax or one or more lead seals.

3. It is warranted by the assured that on all shipments by express insured hereunder at least ten per cent. of the insured value shall be declared to the express company.

4. That the property insured under this policy shall be valued at the sum insured, provided the same does not exceed two per cent. above its market value on the day of mailing or expressing, and that in the event of loss the liability under this policy shall not be greater than market value with two per cent. added.

5. In case of loss, such loss to be paid within fifteen days after proof of loss and proof of interest; and in case of loss or misfortune, it shall be lawful and necessary to and for the assured to sue, labor and travel for, in and about the defense, safeguard and recovery of the property without prejudice to this insurance; and upon the payment of any loss under this policy, the assured, or assigns, in consideration thereof, agree to convey to the said Federal Insurance Company, the unincumbered title in the property lost as absolute owners thereof, and to take all necessary measures in behalf, and at the risk and expense of the said Federal Insurance Company, for the recovery, reissue or replacement of said property, where possible.

6. It is warranted by the assured that shipments of currency, bank or legal tender notes, shall not exceed Fifty Thousand Dollars in each registered package or package by express.

7. It is warranted by the assured that the packing and sealing of the package containing

the property insured hereunder shall be witnessed by two trusted employees, one of whom shall have charge of same until deposited and registered at the post office or until receipted for by the express company.

8. It is agreed that no suit or action against this Company, for the recovery of any claim by virtue of this policy, shall be sustained in any court of law or equity unless such suit or action shall be commenced within twelve months next after the date of mailing or expressing of the package claimed to be lost, and that the lapse of said period shall be a bar to any such suit or action, except that if such limitation of time for the institution of legal proceedings is at variance with any specific statutory provision in relation thereto in force in the State in which this policy is made, issued or delivered, such specific statutory provision shall govern and supersede any condition in this contract inconsistent therewith.

9. This policy is deemed continuous, but either party may cancel it by giving fifteen days' written notice thereof to the other, but said cancellation shall be without prejudice to any risk then pending.

BOILER INSURANCE.—Boiler insurance indemnifies the assured "for all direct or immediate loss or damage caused by the explosion, collapse or rupture of any boiler described in the schedule" embodied in the policy, as follows:

1. "For damage to the boiler or boilers and other property of the assured."
2. "For damage for which the assured may be liable, to the property of any other person or persons."
3. "Against liability imposed upon the assured by law for bodily injuries, including death at any time resulting therefrom, sustained by any person or persons not employed by the assured, but the liability of the company on account of loss of life or injury of any one person shall not exceed the sum of ..... Dollars [usually $5,000] nor exceed the amount of the policy if it be for less than five thousand dollars."

Expenses.—The company agrees to pay—

1. The expenses it incurs in defending any suit brought against the assured.
2. The interest accruing on that part of any judgment in such suit within the limits of the policy.
3. Any court costs taxed against the assured in each suit.

Liability is not assumed in the following cases: loss by fire; if safety valve of any boiler covered by the policy is set for a greater pressure than allowed by the company; or loss caused by stoppage of the plant or other indirect losses.

Use and occupancy insurance may be written in connection with boiler insurance to indemnify against loss caused by stoppage of plant.

FLY WHEEL INSURANCE.—The coverage on fly wheel insurance is the same as for boiler insurance except that the definition of explosion, bursting or breakage is as follows: "shall be understood a sudden violent and complete separation of the fly wheel into two or more parts while revolving, completely separating and dislodging any part or parts of the fly wheel or pulley."

Pulley and other rotating wheels or gears may be also covered under a fly wheel insurance policy.

ENGINE BREAKDOWN INSURANCE.—This form of insurance provides indemnification against loss caused by the breakdown of engines, such as loss or damage to the engine itself including wheels, if any, mounted thereon; the provisions for indemnification of loss or damage to property of the assured and others, as well as the liability for bodily injuries or death are the same as described in boiler insurance; the provisions for payment of expenses and interest in connection with suit and judgments on the same are similar to those in boiler insurance.

Engine Breakdown Defined.—"A sudden, substantial and accidental breaking of the engine or any part thereof, while running, which immediately prevents the continued operation of the engine and which necessitates repairs or replacement before its operation can be resumed." No liability is assumed if a breakdown is caused by running at a speed in excess of that set by the company.

SURETY BONDS.—A surety bond is a **tripartite contract** in which one party, called the **surety,** assures a second party, called the **beneficiary,** that he (the surety) will fulfill a valid obligation of a third party, called the **principal,** should the principal fail to do so.

Fidelity Bonds or Surety Bonds.—While all bonds guaranteeing the fulfillment of obligations are surety bonds, bonds which involve the **fidelity of principals** are generally known as "fidelity bonds." Many surety arrangements combine guaranty of fidelity with guaranty of contract, fulfillment or payment of certain amounts in the event of the occurrence of certain contingencies. Such bonds may be considered as special fidelity bonds.

Good Faith.—Good faith is the important element in surety contracts. **False or fraudulent statements** relieve the "surety" of obligations although such contracts may be binding on the principals. **Concealment of material facts** also relieves the "surety" of his obligations.

Application Blanks Searching.—The information called for in the application blanks for fidelity bonds is searching, the scope embracing business experience, habits, family responsibility, social ties and the moral status of the principal. The statements made therein are carefully investigated. For this reason some employers use these application forms in deciding on the selection of employees, securing and retaining extra copies for their files.

Fidelity Bonds Covering Positions.—Concerns of high standing and reputed good management can obtain bonds to cover certain positions instead of, as in the case of the ordinary fidelity bonds, particular individuals designated by name. Such bonds cover the default of any person holding a **particular position** designated by name in the contract. The number of incumbents must be listed for each position and the premium is based on the number so listed. If the employer unwittingly fails to cover the full number of incumbents of a given position and a default by one of the number occurs, the bonding company would be only obligated for a part of the amount guaranteed, proportionate to the ratio which the number of persons covered bears to the actual number.

Blanket Surety Bonds.—Blanket surety bonds are issued to bankers to cover the loss of money, securities, etc., sustained through dishonesty of their employees, theft on the part of outsiders, burglary, hold ups, etc., but such bonds do not guarantee losses through errors of judgment, such as credit losses.

Classification of Surety Bonds.—The following table from "Surety Bonds," by Edwin C. Lund, lists the important surety bonds in general use, alphabetically arranged. The abbreviations "Obl" and "Prin," appearing in parentheses mean "obligee" (beneficiary) and "principal," respectively.

Abbreviations used in the classification column indicate the division of surety to which the bonds belong. These abbreviations are as follows:

"Cus. H." for custom house
"Fid." for fidelity
"Fiduc." for fiduciary
"Int. Rev." for internal revenue
"Lic. and Per." for license and permit
"Misc. Sur." for miscellaneous surety
"Pub. Off." for public official

The number occasionally appearing in parentheses after the name of the classification identifies the government form of bond in question.

Types of Surety Bonds

Kind of Bond	Classification
Abatement (Deferred Tax)	Int. Rev.
Abstractors	Lic. and Per.
Administrators	Fiduc.
Admiralty	Court
Advertising Signs	Lic. and Per.
Agents	Fid.
Agents, Real-Estate	Lic. and Per.
Alcohol, Withdrawal of (1448)	Int. Rev.
Alien, Entry of (554 etc.)	Misc. Sur.
Almshouses	Fid.
American Legion	Fid.
Amusement Enterprises	Fid.
Annual Supply	Contract
Appeal (Supersedeas)	Court
Appearance (Bail)	Court
Armories (Use of)	Misc. Sur.
Arrest	Court
Assay Offices	Pub. Off.
Assessors	Pub. Off.
Assigned Accounts	Fid.
Assignee for Benefit of Creditors	Fiduc.
Asylums	Fid.
Attachment, Plaintiff's	Court
Attachment, Defendant's	Court
Attorneys (Collections)	Fid.
Automobile Conversion	Fid.
Automobile Confiscation	Misc. Sur.
Automobile Companies	Fid.
Auctioneers	Lic. and Per.
Awnings	Lic. and Per.
Bail	Court
Bankers' Blanket	Fid.
Bankers' Trust Receipt	Misc. Sur
Bankers, Private (Obl.)	Fid.
Bankers, Private (Prin.)	Fid.
Bankruptcy	Fiduc.
Banks (Obl.)	Fid.
Banks (Prin.)	Depository
Beneficial Orders	Fid.
Benevolent Associations	Fid.
Bid	Contract
Bill-board	Lic. and Per.
Billiard-rooms	Lic. and Per.
Bill of Lading (Unavailable)	Misc. Sur.
Blanket Bonds	Fid.
Blasting	Lic. and Per.
"Blue Sky"	Misc. Sur.
Board of Trade	Fid.
Bond and Stockbrokers	Fid.
Bonded Warehouse (To Bd. of Trade, etc.)	Misc. Sur.,
Bonded Warehouse (3581)	Cus. H.
Bonded Warehouse (1435)	Int. Rev.
Bonded Warehouse (351)	Int. Rev.
Bookkeepers	Fid.
Boxing-Club Licenses	Lic. and Per.
Branch Managers	Fid.
Brewers (20)	Int. Rev.
Brokers, Bond and Stock	Fid.
Brokers' Blanket	Fid.
Building and Loan Associations	Fid.
Building Permits	Lic. and Per.
Buyers	Fid.
Canopies	Lic. and Per.
Canvassers	Fid.
Cartmen's License (3855)	Cus. H.
Cashiers	Fid.
Certiorari	Court
Chain Stores	Fid.
Chamber of Commerce	Fid.
Charitable Institutions	Fid.
Charter Parties	Contract
Chattel-Loan Companies (Obl.)	Fid.
Chattel-Loan Companies (Prin.)	Lic. and Per.
Cigar and Cigarette Manufacturers (71)	Int. Rev.
Cigarette	Lic. and Per.
Claimant of Seized Goods (4615)	Cus. H.
Clerk of Court	Pub. Off.
Clubs	Fid.
Collateral-Trust Receipts	Misc. Sur.
Collection Agencies (Obl.)	Fid.
Collection Agencies (Prin.)	Lic. and Per.
Collectors	Fid.
Collector's Indemnity (7581)	Cus. H.
Collectors of Internal Revenue	Pub. Off.
College Societies	Fid.
Commission Merchants	Misc. Sur.
Commissioners, Sale of Real Estate	Court and Fiduc.
Committees	Fiduc.
Common Carriers (3587)	Cus. H.
Conservators	Fiduc.
Consignees	Fid.
Constables	Pub. Off.
Consumption Entry, Single (7551)	Cus. H.
Consumption Entry, Term (7553)	Cus. H.
Contract	Contract
Convict Lease	Contract
Co-operative Companies	Fid.
Costs	Court
Cotton Compress	Fid.
Counter-Replevin	Court
County Treasurers	Pub. Off.
County Clerks	Pub. Off.
Curators (Guardians)	Fiduc.
Cutting Timber	Contract
Dealcoholizing Plants (1408)	Int. Rev.
Dealers in Leaf Tobacco (771)	Int. Rev.
Debts and Legacies	Misc. Sur.
Decedents' Debts	Misc. Sur.
Denatured Alcohol (1462)	Int. Rev.
Denatured Alcohol (1480)	Int. Rev.
Department Stores	Fid.
Depository	Depository
Destroyed or Lost Securities	Misc. Sur.
Detective License	Lic. and Per.
Discharge of Attachment	Court
Discharge of Injunction	Court
Discharge of Lien	Court

Types of Surety Bonds—(Continued)

Kind of Bond	Classification	Kind of Bond	Classification
Discharge from Arrest	Court	Lien, to Forestall One against Building or Improvement	Misc. Sur.
Distillers (30 or 30½)	Int. Rev.	Lien, to Release Known Lien	Court
Drain-Layers	Lic. and Per.	Lien on Plant (3)	Int. Rev.
Druggists (1408)	Int. Rev.	Liquidators	Court
Electricians	Lic. and Per.	Loan Offices	Fid.
Elevators, Grain (Prin.)	Misc. Sur.	Local Lodges	Fid.
Elevators, Grain (Obl.)	Fid.	Lost Securities	Misc. Sur.
Employment Agencies	Lic. and Per.	Lumber Companies	Fid.
Executive Officers	Fid.	Maintenance	Contract
Executors	Fiduc.	Managers	Fid.
Explosives	Lic. and Per.	Managers, Warehouses	Fid.
Exportation or Transportation, Single (7557)	Cus. H.	Manufacturers of Cider (1408)	Int. Rev.
Exportation or Transportation, Term (7559)	Cus. H.	Manufacturers of Wine (1408)	Int. Rev.
Exporters (547-48 etc.)	Int. Rev.	Marshals	Pub. Off.
Farmer's Co-operative Elevators	Fid.	Marshal's Indemnity	Court
Federal Reserve Banks	Fid.	Masters (to Sell Real Estate)	Court
Fidelity Foreign Risks	Fid.	Mechanics' Lien	Misc. Sur.
Filled-Cheese Manufacturers (214)	Int. Rev.	Milk Dealers	Lic. and Per.
Financial Guarantees	Misc. Sur.	National Guard	Fid.
Flavoring Extracts (1408)	Int. Rev.	Non-Beverage Alcohol (1408)	Int. Rev.
Forthcoming	Court	Notary Public	Pub. Off.
Franchise and Ordinance	Misc. Sur.	Oil and Gas Leases	Misc. Sur.
Fraternal Orders	Fid.	Oleomargarine Manufacturers (214)	Int. Rev.
Freight Charge	Misc. Sur.	Open Estates	Misc. Sur.
G. A. R. Posts	Fid.	Opening or Obstructing Streets	Lic. and Per.
Garnishment	Court	Orders, Fraternal	Fid.
Grain Elevators (Obl.)	Fid.	Patent Infringements	Misc. Sur.
Grain Elevators (Prin.)	Misc. Sur.	Pawnbrokers	Lic. and Per.
Guarantee of Merchandise	Misc. Sur.	Peddlers, Tobacco (111)	Int. Rev.
Guardians	Fiduc.	Permanent Exhibition (7565)	Cus. H.
Hack-Drivers	Lic. and Per.	Petitioning Creditors	Court
Hoisting	Lic. and Per.	Pistol-Toting	Lic. and Per.
Hospitals, Colleges, etc. (1448)	Int. Rev.	Plumbers	Lic. and Per.
Hotels	Fid.	Post Office Staff	Pub. Off.
Hunters	Lic. and Per.	Private Bankers (Obl.)	Fid.
Immigrants (554 etc.)	Misc. Sur.	Private Bankers (Prin.)	Fid.
Importers' Warehousing (7555)	Cus. H.	Proposal	Contract
Income Tax (Deferred Payment)	Int. Rev.	Public Administrators	Pub. Off.
Industrial Alcohol (1432)	Int. Rev.	Public Buildings, Use of	Misc. Sur.
Injunction, Defendant's	Court	Public-Service Corporations	Fid.
Injunction, Plaintiff's	Court	Purchasing Agents	Fid.
Insurance Companies (Bonded Staff)	Fid.	Pure Food and Drugs Act	Court
Insurance Companies (Qualifying)	Misc. Sur.	Railroad and Steamship Lines	Fid.
Jewelers	Fid.	Railway Mail Clerks	Pub. Off.
Jitney-Cars	Lic. and Per.	Real Estate Agents	Fid.
Junk Dealers	Lic. and Per.	Real Estate Brokers	Lic. and Per.
Labor Unions	Fid.	Receivers	Fiduc.
Laundry Companies	Fid.	Rectifiers (1408)	Int. Rev.
Law-List Companies	Fid.	Redelivery (Counter-replevin)	Court
Leaf-Tobacco Dealers (771)	Int. Rev.	Referee in Bankruptcy	Fiduc.
Lease	Misc. Sur.	Refunding	Misc. Sur.
Legatees (Refunding)	Misc. Sur.	Release of Libel	Admiralty
Lenders' (Lien Bonds)	Misc. Sur.	Reindemnifying	Pub. Off.
Letter-Carriers	Pub. Off.	Removal of Cause	Court
Libel, Release of	Admiralty	Renovated-Butter Manufacturers (214)	Int. Rev.
		Replevin (Plaintiff's)	Court
		Return of Property	Misc. Sur.

Types of Surety Bonds—(Continued)

Kind of Bond	Classification	Kind of Bond	Classification
Safe-Deposit Companies	Fid.	Temporary Importation (7563)	Cus. H.
Salary Loan Offices	Fid.	Theatre License	Lic. and Per.
Salesmen	Fid.	Theatrical Companies	Fid.
Sanitariums (1408)	Int. Rev.	Ticket-Agents	Fid.
Screen-Wagons	Contract	Timber-Cutting	Contract
Second-Hand Dealers	Lic. and Per.	Tobacco Manufacturers (40)	Int. Rev.
Sewer-Tappers	Lic. and Per.	Tobacco Peddlers (111)	Int. Rev.
Sheriffs	Pub. Off.	Trucks (1408)	Int. Rev.
Sheriff's Indemnity	Court	Trustees	Fiduc.
Sidewalks	Contract	Tutors	Fiduc.
Signs	Lic. and Per.	Vessel, Single (7567)	Cus. H.
Six-Months (7563)	Cus. H.	Vessel, Term (7569)	Cus. H.
Snuff Manufacturers (71)	Int. Rev.	Warehouse Custodians	Fid.
Social Clubs	Fid.	Warehouse (Prin. to Bd. of Trade, etc.)	Misc. Sur.
Specially Denatured Alcohol (1475)	Int. Rev.	Warehouse (3581, 3583)	Cus. H.
Star-Route	Contract	Warehouse (351)	Int. Rev.
Stay of Execution	Court	Warehouse (1435)	Int. Rev.
Steamship and Railway Lines	Fid.	Warehousing, Importers' (7555)	Cus. H.
Steamship Ticket-Agents	Fid.	Wine Dealers (1408)	Int. Rev.
Steamship Ticket-Agents and Bankers	Fid.	Wine Manufacturers (1408)	Int. Rev.
Stipulation for Costs	Court	Withdrawal of Alcohol (1448)	Int. Rev.
Stock and Bond Brokers	Fid.	Workmen's Compensation	Fid.
Storing Explosives	Lic. and Per.	Workmen's Compensation and Employers' Liability	Misc. Sur.
Street-Opening or Obstruction	Lic. and Per.	Writ of Error	Court
Supersedeas	Court	Writ of Prohibition	Court
Supply	Contract		
Tax-Collectors	Pub. Off		

FORGERY INSURANCE.—Insurance may be obtained which provides for indemnification to individuals, mercantile concerns and banks against loss through payment or acceptance of forged or raised checks, bank drafts, bills of exchange and trade acceptances. **Four types of policies** are written: depositors' policy, commercial policy, bankers' blanket forgery, and bankers' limited policy.

The coverage provided by each type is as follows:

1. The Depositors' Policy.—Protects the assured and his bank from loss occasioned by—

Forgery of the name of the assured as maker, drawer or acceptor of a check, draft, bill of exchange or trade acceptance.

Forgery or alteration of the signature of any endorser on a check, draft, note, bill of exchange or trade acceptance, purporting to have been drawn by the assured.

Raising or alteration of a check, note, draft, bill of exchange or trade acceptance purporting to have been drawn by the assured (except those drawn in non-indelible lead pencil).

2. The Commercial Policy.—Broader than the depositors' policy. Gives the following additional protection: Against loss through acceptance for merchandise, property or services rendered of a check or draft, bearing a forged signature or endorsement raised or altered. The company's liability in such cases is limited to 75% of the amount of the check or draft and on any one such bank check or draft to 10% of the amount of the policy. Check returned marked "no account" or "insufficient funds" or drawn in lead pencil (except indelible) is not covered.

3. **The Bankers' Blanket Forgery Policy.**—Protects against loss caused by—

Forgery of a depositor's signature or that of his authorized agent as drawer, maker or acceptor on checks, drafts, notes and acceptances drawn upon or payable at the bank.

Forgery of the signature of an endorser on checks or drafts drawn upon the bank; notes or acceptances payable at the bank; certificates of deposit issued, or bank acceptances made by the bank.

Forgery of a depositor's signature as endorser of any check or draft drawn upon any bank.

Forgery of the signature of a person authorized by the bank to sign checks, drafts, certificates of deposit or to make acceptances for the bank.

Forgery of the signature of an endorser on checks, drafts, certificates of deposit or bank acceptances drawn, made or issued by the bank or purporting to have been drawn or issued.

Alteration of checks, drafts, notes, acceptances and certificates of deposit when drawn upon or made payable at the bank or when drawn or issued by the bank.

4. **The Bankers' Limited Policy.**—Protects the insured against loss caused by—

Forgery of the signature on savings account withdrawal orders when drawn or purporting to have been drawn upon the bank by a depositor and accompanied by the savings account pass book.

Forgery of the name of the drawer, maker, acceptor or endorser of a check drawn or purporting to have been drawn by a depositor and certified or purporting to have been certified by the bank, and thereafter paid through Clearing House or Exchange or deposited to the credit of a depositor.

Forgery of the signature as to the maker, drawer, acceptor or endorser of any certificate of deposit issued or purporting to have been issued by the bank.

DRUGGISTS' LIABILITY INSURANCE.—Druggists may secure indemnification against loss from claims or lawsuits against them on account of bodily injury or death of any persons or persons as a result of **a mistake made by them or their employees** in filling prescriptions, preparation of drugs or medicine, selling the same or other goods usually sold in drug stores or in delivering such drugs, medicines or other goods.

SECTION 11

TYPES OF BUSINESS ORGANIZATIONS

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SECTION 11

TYPES OF BUSINESS ORGANIZATIONS

This section sets forth the various types of business organizations, their salient features and their relative advantages and disadvantages. The treatment of the subject is from the viewpoint of **legal organization,** and the **types of organizations discussed are:**

1. Sole proprietorships
2. Partnerships
3. Joint stock companies
4. Corporations
5. Holding companies
6. Subsidiaries
7. Massachusetts or common law trusts

Sole Proprietorships

The simplest form of business organization is the sole proprietorship, in which **one man** is the owner and manager. Most small businesses are operated in this manner. The owner may be assisted in his operations by any number of employees, whose relation to him is that of agent to principal.

ADVANTAGES.—The sole proprietorship has certain distinct advantages:

1. **Flexibility of Management.**—A sole proprietor can make immediate adjustments in his business to meet changing conditions, inaugurating new policies at will, without having to consult partners, directors or stockholders.

2. **Centralized Control.**—The administration is highly centralized, as all the powers of management are vested in an individual.

3. **Secrecy.**—Its business operations may be kept entirely secret. No documents of any kind have to be made public.

4. **Freedom from Business Taxation.**—This form of ownership, with the exception of certain kinds of brokers, is not burdened by the numerous forms of taxes that are imposed upon corporations.

DISADVANTAGES.—As a sole proprietorship business grows in size, its operations become increasingly difficult. A single owner would find it impossible to operate most of the large businesses of the present day. Many concerns which started as sole proprietorships ultimately evolve into partnerships or corporations as the business expands.

Other disadvantages are:

1. **Financial Limitations.**—The owner is limited in his means of securing outside capital.

2. **Sole Liability.**—The entire financial risk falls upon the owner. Any property which he possesses may be attached for the payment of debts contracted in the business.

3. **Lack of Continuity.**—The death of the owner terminates the proprietorship. Illness or enforced absence of the proprietor may cause disruption.

RELATIVE IMPORTANCE OF SOLE PROPRIETORSHIP.—The individually owned enterprise still remains the commonest form of business organization in the United States. However, the sole proprietorship has been steadily **decreasing in relative importance.** It has been estimated that the net income from this type of business in the United States is only about one-half of that of corporations. The value of their products is even proportionately less.

TRADE-NAMES.—When a sole proprietor operates his business under a **trade-name,** or an **assumed name,** the statutes of most states require that he shall file in the office of the clerk of the county court in which the business is conducted **a certificate** giving the name under which the business is conducted, together with his own name and address. This requirement applies likewise to partners conducting a business under an assumed name or trade-name. Failure to comply with the statutes may result in a fine or imprisonment. In some states, where owners have failed to comply with the statutes, they may not maintain an action upon their contracts.

Partnerships

DEFINITION.—"A contract of partnership is one by which two or more persons agree to carry on a business for their common benefit, each contributing property or services, and having a community of interest in the profit. It is in effect a contract of mutual agency, each partner acting as a principal in his own behalf and as agent for his copartner." (*Kerrick* v. *Hannaman,* 168 U. S. 328.)

ESSENTIALS OF PARTNERSHIPS.—

1. Capacity of Parties.—The parties must be legally competent to bind themselves by contract. Minors, insane persons or other incompetents at law cannot become partners.

2. Agreement.—There must be an agreement, either written or oral, between the partners. If formally written, it is termed "Articles of Copartnership."

3. Community of Interest.—There must be some community of interest, consisting of services, property or capital.

4. Purpose.—There must be a lawful business conducted with a view to making profit.

CLASSIFICATION OF PARTNERSHIPS.—

General Partnerships.—A general partnership is one in which the business is conducted for the joint benefit, profit and risk of all partners, each partner sharing the profits and losses regardless of the ratio of the capital contributed, but among themselves the partners may agree on unequal salaries, interest rates on capital and divisions of profits and/or losses.

Limited Partnerships.—A limited partnership consists of one or more general partners, who are liable for the debts of the firm as in a general partnership, and **special partners** whose liability is limited to the extent of their contributions. The profits are shared in accordance with the agreement of the partners. In every limited partnership there must be at least one general partner.

Single Venture Partnerships.—When a partnership is formed for a single venture, or for the transaction of a single business, it is known as a **single venture, particular partnership** or **special partnership.**

ADVANTAGES.—The advantages of partnerships are:

1. **Capital.**—The chief advantage of the partnership lies in the aggregate amount of capital which is available for the firm from the individual partners, enabling the partnership as a whole to carry on a larger volume of business than would be possible for the individual partners acting as sole proprietors of separate businesses.

2. **Increased Credit.**—The credit position of the partnership may be stronger than that of a sole proprietor on account of the **unlimited liability** of each general partner for the debts of the firm as a whole. With greater credit facilities the partnership is enabled to meet enlarged business needs.

3. **Management.**—The flexibility of management and the possibility of specialization by individual partners, in the branches of the business each is best able to serve, are greater.

4. **Combinations of Effort, Skill and Experience** of the several partners are distinct advantages in formulating and prosecuting business policies.

DISADVANTAGES.—The disadvantages of partnerships are:

1. **Unlimited Liability.**—Each general partner is fully liable for all firm obligations to the extent of his **entire personal fortune.** The partners may agree between themselves to limit the liability of one or all of the partners, but this agreement is not binding upon outsiders dealing with the firm, who may hold any general partner to satisfy the entire debts of the firm.

2. **Acts of One Bind All.**—Each partner has authority to bind the firm by contract, having full power to act as a general agent.

3. **Possibility of Friction.**—Since the act of one partner binds all, there is a possibility of friction which increases with the number of partners. To meet this situation the articles of copartnership should set forth clearly the duties of the several partners. Sometimes the authority of partners, among themselves, is made proportionate to their capital investment.

4. **Limitations of Capital.**—As in the case of the sole proprietorship, the partnership is limited in its means of raising new capital. The partners must generally choose between reinvesting earnings and taking in new partners.

5. **Slower Action.**—In changes of policy, partnerships, because of possible divergent views of the several partners, may be slower in action than a sole proprietorship.

6. **Uncertainty of Life of Business.**—The death of one of the partners terminates the partnership.

ARTICLES OF COPARTNERSHIP.—The articles of copartnership correspond to the charter, by-laws and minutes of a corporation, and should therefore be drawn up with great care. In drawing up their agreement, the partners should be certain to include the following important provisions:

1. **Nature of Business.**—The scope of the business and the relation of each partner to the business should be clearly stated; also whether a partner is permitted to engage in outside transactions and whether or not each partner is required to devote all of his time to the business.

2. **Capital.**—Specify the amount to be contributed by each partner, and how it is to be paid. If partners agree to contribute equally, the agreement should state whether cash or its equivalent is to be paid in and the penalty, if any, for the failure of one partner to contribute as much as another.

3. Changes in Capital.—If undrawn profits automatically increase and losses decrease the capital accounts of the partners, the agreement should cover the point fully, since the interests of the partners in capital and profits may not be the same.

4. Interest on Capital.—Unless provided for in the agreement, capital contributions do not bear interest. If interest is to be allowed, the rate should be fixed.

5. Withdrawals.—Since this is frequently a matter of dispute, explicit provision should be made to cover the manner and extent of withdrawals and the penalty for overdrafts.

6. Undrawn Profits.—If profits are allowed to accumulate, the agreement should state whether such amounts are to be treated as loans or additional capital. This provision is important, since the agreement may provide (see 8 below) that profits are to be apportioned on the basis of capital contributed.

7. Interest on Loans or Withdrawals.—If it is desired that interest should be allowed on loans, or charged on withdrawals, so state and specify the rate.

8. Distribution of Profits or Losses.—State the method of apportioning profits or losses and specify each partner's percentage, also any contingency which may affect the share of any one.

9. Approval of Accounts.—There should be some agreement as to the approval of the individual partners' accounts in respect to withdrawals as well as in respect to the income and capital accounts.

10. Salaries of Partners.—If any partner is to receive a stated salary, specify the amount, when it is to be credited, whether or not interest is to be allowed thereon if undrawn and whether the amount is to be charged as an expense of the business before ascertaining the profit or loss.

11. Dissolution.—State procedure if partner dies or withdraws; whether books shall be balanced at once or allowed to run on to end of month or other period; whether, in case of dissolution, partners are to share losses in same proportion as each one's capital bears to entire capital.

12. Special Causes for Dissolution.—If partnership can be dissolved for other reason than death, such as disability or intemperance, state complete details.

13. Settlement after Dissolution.—It is important not only to arrange the method of determining each partner's share upon dissolution, but it is equally important to fix the details of payment. The most equitable way is to provide for full payment within a fixed period, or to pay a certain proportion annually or semiannually. State rate of interest on balance.

14. System of Accounts.—To obviate subsequent differences of opinion as to the system of accounts, the agreement should specify that double-entry accounts be kept, that they be balanced regularly and that they be audited annually or oftener by a professional accountant. It is desirable that the method of selecting the auditor be stated.

15. Disputes about Accounts.—An arbitration clause should be inserted to the effect that if any dispute arises involving the accounts, it is to be submitted for settlement to a certified public accountant to be mutually agreed upon. Since disputes occur with respect to other matters as well as to the accounts, in such cases the reference should be made to a certified public accountant and a lawyer, with power lodged in them to select a third party in case of disagreement.

16. Firm Insurance.—If life insurance for the benefit of the firm is to be carried on the life of one or more partners, state how the premiums are to be paid, and the disposition of the proceeds if collected. Also state the disposition if the partnership is dissolved while the policy is in force.

17. Good Will.—If withdrawing partners or representatives of deceased partners are entitled to good will, based on profits or otherwise, state the method of calculation in detail. For instance, if salaries of partners are treated as business expenses in determining annual distributions, state whether or not such salaries are to be likewise treated if good will is based on "average net profits." Salaries of partners and interest on partners' capital are in reality divisions of profit—not expenses—and it requires a clear and affirmative agreement to deal with them as expenses. Where no agreement exists as to how the profits are to be divided the law gives each partner an equal share in the profits and assumes that the losses will be borne equally by each partner.

AUTHORITY OF PARTNERS AND ITS LIMITATIONS.—Each general partner is an **agent of the partnership** with full authority to transact its ordinary business, and such acts as he performs in this capacity are binding upon the other partners. There are certain acts which he is prohibited by law from doing, unless given special power so to act by the other partners. These acts are:

1. Disposing of the good will of the business.
2. Doing any act which would prevent further conduct of the business.
3. Selling at one time all the partnership property.
4. Submitting a partnership claim to arbitration.
5. Confessing a judgment.
6. Assigning any of the partnership property to a creditor or to a trustee for the benefit of creditors.

LIABILITY OF PARTNERS.—General partners are liable to the full extent of their personal fortunes for any of the firm debts. Each general partner, therefore, is a **surety for his copartners.** A partner is entitled to contributions from his copartners for their proportionate shares in the firm debts which they should have paid. A new partner coming into a firm is not liable for the debts of the old firm unless he agrees to undertake such liability or unless creditors extend time of payment or otherwise prejudice themselves at his request. A partner retiring from a firm is liable as surety for all obligations incurred up to the time of retirement. He must furthermore give **proper notice of his retirement** to the firms with whom his partnership has previously transacted business and to the public generally by newspaper publication. Otherwise he may be held liable for subsequent debts of the firm, if credit has been extended in reliance upon his credit and in ignorance of his withdrawal from the firm.

FEDERAL TAX RETURNS OF PARTNERSHIPS.—Partnerships pay no federal income taxes as entities but the **partners** are **individually taxable** on their distributive shares of profit. Nevertheless, every partnership must, under the 1924 law, file an annual return giving the data necessary for the determination of the distributive shares of profit or loss.

"Individuals carrying on business in partnership shall be liable for income tax only in their individual capacity. There shall be included in computing the net income of each partner his distributive share, whether distributed or not, of the net income of the partnership for the taxable year, or, if his net income for such taxable year is computed upon the basis of a period different from that upon the basis of which the net income of the partnership is computed, then his distributive share of the net income of the partnership for any accounting period of the partnership ending within the taxable year upon the

basis of which the partner's net income is computed." [Sec. 218 (a), Revenue Act of 1924.]

"Every partnership shall make a return for each taxable year, stating specifically the items of its gross income and the deductions allowed by this title, and shall include in the return the names and addresses of the individuals who would be entitled to share in the net income if distributed and the amount of the distributive share of each individual. The return shall be sworn to by any one of the partners." (Sec. 224, Revenue Act of 1924.)

U. S. TREASURY INTERPRETATION OF LIMITED PARTNERSHIPS.—The U. S. Treasury draws a distinction between different types of limited partnerships, regarding one type as corporations and the other type as partnerships for federal income tax purposes.

"So-called limited partnerships of the type authorized by the statutes of New York and most of the states are partnerships and not corporations within the meaning of the statute. Such limited partnerships, which cannot limit the liability of the general partners, although the special partners enjoy limited liability so long as they observe the statutory conditions, which are dissolved by the death or attempted transfer of the interest of a general partner, and which cannot take real estate or sue in the partnership name, are so like common-law partnerships as to render impracticable any differentiation in their treatment for tax purposes. Michigan and Illinois limited partnerships are partnerships. A California special partnership is a partnership." (Reg. 65, Art. 1505.)

WHEN LIMITED PARTNERSHIPS ARE CONSTRUED AS CORPORATIONS.—The regulations are frank in stating that when there is doubt it will be resolved in favor of corporate status.

"On the other hand, limited partnerships of the type of partnerships with limited liability or partnership associations authorized by the statutes of Pennsylvania and a few other states are only nominally partnerships. Such so-called limited partnerships, offering opportunity for limiting the liability of all the members, providing for the transferability of partnership shares, and capable of holding real estate and bringing suit in the common name, are more truly corporations than partnerships and must make returns of income and pay the tax as corporations. The income received by the members out of the earnings of such limited partnerships will be treated in their personal returns in the same manner as distributions on the stock of corporations. In all doubtful cases limited partnerships will be treated as corporations unless they submit satisfactory proof that they are not in effect so organized. A Michigan partnership association is a corporation." (Reg. 65, Art. 1506.)

Joint Stock Companies

DEFINITION.—A joint stock company is a **form of partnership** in which the capital contributions of the partners are represented by **transferable shares of stock.** The holders of such stock are partners and are held to the **full liability of general partners.** For this reason, the joint stock company is not a common form of organization in the United States, but in Great Britain it occupies a position equivalent to that of the corporation in America.

RIGHTS.—The statutes of most states empower a joint stock company **to hold real property in the name of its president.** They also permit the **mortgaging of such real estate.** In New York a joint stock company may sue or be sued in the name of the president or treasurer. An individual member is not liable for the debts of the company until it is shown that the claim cannot be

collected from the company. The New York courts hold (*In re Wilner's Estate*, 153 App. Div. [N. Y.] 804) that a joint stock company owes its existence to the contracts of its members and does not exist as an entity distinct from its members. It exists wherever it does business or owns property.

LIFE AND OPERATION OF A JOINT STOCK COMPANY.—The life of a joint stock company continues for the period shown in the articles of association unless previously dissolved by mutual consent, bankruptcy, dissolution by courts or the acquisition of ownership of all the shares by one member.

The management of a joint stock company is in the hands of **a board of directors** selected by all the members of the company. The relationship between the directors and the members is similar to that of the directors and stockholders of a corporation. The members of a joint stock company are not agents of the company as in the case of partners.

CHANGE FROM CORPORATION TO JOINT STOCK COMPANY.—If the joint stock company is to be substituted for the close corporation, the articles of association should be carefully prepared. They are as important to the company as the charter is to a corporation, since they regulate the duties of the officers and the duties and obligations of the members.

ADVANTAGES.—The chief advantage of the joint stock company lies in its freedom from objectionable state taxation and the publicity imposed upon corporations. It is an improvement over the ordinary partnership in that its interests are as easily transferred and divided as those of the corporation. Also, there is no interruption or reorganization necessary on the death or bankruptcy of a member.

DISADVANTAGES.—The joint stock company form is not extensively used in the United States for the following reasons:

1. Each member of the company is **individually liable** for company debts which cannot be satisfied out of company property.
2. It cannot generally hold title to real property under its collective name. Such real property must be held by some agent or officer as trustee for the company and any conveyances or incumbrances must be executed by this procedure.
3. State statutes generally provide that such companies may sue or be sued in the names of their presidents or treasurers, but the statutory regulations are not uniform, the procedure is often very technical, and the laws of each state are the only safe guide.

A joint stock company is not a legal entity in the absence of such a statutory provision. Generally, however, the **tendency of statutory regulation** has been to assimilate the provisions governing joint stock companies to those governing corporations so far as is consistent with the fundamental difference in type of the two organizations. So far as possible, joint stock companies are considered as an entity and the representative officer or officers considered as trustees for many purposes.

On the other hand, the ultimate personal liability of each shareholder is never lost sight of and, however the procedure in enforcing this liability may vary in the different states, the shareholder may be held for any deficiency in company assets in the discharge of its liabilities. In the final analysis, the shareholders are really partners, but on account of the unwieldiness of attempting to apply the procedure used with an ordinary partnership to an organization consisting of a very considerable number of individuals and subject to frequent change in membership, statutes have been enacted for the purpose of confining the pro-

cedure against or transactions with individual members to those cases where liability of the individual shareholder is directly involved.

When the company is dissolved, the shareholders may be assessed pro rata by the court to meet any deficiency in assets necessary to meet the obligations of the company.

STATUTORY REQUIREMENTS.—The New York statutes require a joint stock company doing business in that state to file with the Secretary of State and with the county clerk a **written certificate** giving its name, date of organization, number of stockholders, names and residences of its officers and its place of business. This report must be filed within 60 days after formation of the company, and a similar report must be filed each January following. Other states have similar requirements.

FEDERAL TAXES ON JOINT STOCK COMPANIES.—Partnership associations, or joint stock companies, are generally **classed for purposes of taxation with corporations.** The Federal Income Tax Law merely states that the term "corporation" shall include "associations, joint stock companies and insurance companies."

The regulations define joint stock companies and associations as follows:

"Associations and joint stock companies include associations, common law trusts, and organizations by whatever name known, which act or do business in an organized capacity, whether created under and pursuant to state laws, agreements, declarations of trust, or otherwise, the net income of which, if any, is distributed or distributable among the shareholders on the basis of the capital stock which each holds, or, where there is no capital stock on the basis of the proportionate share or capital which each has or has invested in the business or property of the organization. A corporation which has ceased to exist in contemplation of law but continues its business in corporate form is an association or corporation within the meaning of section 2, but if it continues its business in the form of a trust, it becomes subject to the provisions of section 219." (Reg. 65, Art. 1502.)

Corporations

DEFINITION.—A corporation is an artificial entity created by law for specific purposes, the limit of whose existence, powers and liberties is fixed by its charter.

A more comprehensive definition of a corporation is given by Chief Justice Marshall in the celebrated case, *Dartmouth College* v. *Woodward* (17 U. S. 518), where it is stated that: "A corporation is an artificial being, invisible, intangible, existing only in contemplation of law and possessing the qualities of immortality and individuality, by which a perpetual succession of many persons are considered as the same, and may act as an individual." Another less colorful definition is: "A corporation is a collection of natural persons, joined together by their voluntary action or by legal compulsion, by or under the authority of an act of legislature, consisting either of a special charter or of a general permissive statute, to accomplish some purpose, pecuniary, ideal, or governmental, authorized by the charter or governing statute, under a scheme of organization, and by methods thereby prescribed or permitted; with the faculty of having a continuous succession during the period prescribed by the legislature for its existence, of having a corporate name by which it may make and take contracts, and sue and be sued, and with the faculty of acting as a unit in respect of all matters within the scope of the purpose for which it is created." (10 Cyc. 143.)

DISTINCTIVE FEATURES.—The distinctive characteristics of corporations are: (1) Separate legal entity; (2) continuous existence; (3) power to take and grant property; (4) right to contract, sue and be sued in its own name; and (5) right to act as an individual within the limits stipulated in the corporation's charter.

ADVANTAGES.—The chief advantages of the corporate form of organization are as follows:

1. The liability of the stockholders is **usually limited** to a definite amount.
2. It has a **distinct legal entity** and acts as a single body for all business purposes.
3. The capital interest of the stockholders of the corporation is represented by **transferable shares.**
4. The **organization is stable and permanent,** not being affected by the death of its stockholders.
5. There are numerous ways of securing capital under the corporate form, because its many safeguards and advantages have a great appeal to investors.

Briefly, a corporation is a convenient means of associating a large number of persons in a single enterprise.

DISADVANTAGES.—Of late years the legislatures of the different states and the federal government have imposed **heavy burdens** upon corporations in the way of taxes and special reports.

TAX ON CORPORATIONS.—The taxes affecting corporations are as follows:

1. Organization taxes
2. Annual franchise taxes
3. Local property taxes
4. State income taxes
5. State inheritance taxes
6. State stock transfer taxes
7. Tax on foreign corporations
8. Federal income taxes
9. Federal capital stock taxes
10. Federal stock transfer taxes

(For detail discussion on corporation taxes see section on Federal Taxes.)

REPORTS BY CORPORATIONS.—Corporations are frequently called upon to make special reports of their activities to stockholders and often to various federal and state bodies. Annual reports must be made for federal and state taxing purposes.

RIGHTS OF STOCKHOLDERS.—The rights of stockholders may be summarized as follows:

1. To attend and vote at corporate meetings.
2. To elect directors.
3. To participate in dividends or profits.
4. To share in corporate assets on dissolution.
5. To inspect corporate books.

HOLDING COMPANIES.—A holding company is a corporation formed to control other corporations through the **ownership of voting stock.** The holding company has virtually taken the place of the trust. Some states, among which are New York, New Jersey and Delaware, have passed laws allowing corporations to purchase, hold, sell, mortgage and transfer stock and securities of other corporations and to exercise the right to vote such stock. These laws have provided a means whereby a group of corporations can be brought under one management. **Fifty-one per cent** of a corporation's outstanding stock is enough to control it, or, if the stock is scattered, 40% or even less may be sufficient, as this may prove a majority of the stock voting at a meeting, or

proxies for sufficient may always be secured to insure control of an actual majority of the total stock outstanding.

LEGALITY OF HOLDING COMPANIES.—The U. S. Supreme Court has ruled that the control of competing businesses by means of a holding company is illegal if done in a manner to violate the **Sherman Anti-Trust Law.** The use of the holding company is not illegal when the control exercised is not in restraint of trade and does not tend to lessen competition or create a monopoly. Holding companies created for purposes of economy in operations are not illegal. The **Clayton Act of 1914** forbids corporations engaged in interstate commerce from acquiring part of the stock of another corporation under certain conditions, when the effect may be to lessen competition, to restrain trade, or to create a monopoly. (See the section on Federal Regulation of Business.)

SUBSIDIARY COMPANIES.—A subsidiary company is one whose entire stock, or a controlling majority of whose stock, is owned by another company, known as the holding or **parent company.**

There are numerous reasons for the use of the subsidiary company. A common reason is that some organizations desire to do business in a number of states. By this means, capital investment and other details may be arranged to suit the requirements of any state laws. If the corporation is allowed to hold stock according to the state statutes, the corporate stockholders have the same rights as individual stockholders.

Massachusetts Trusts

DEFINITION.—A Massachusetts trust, also known as "express trust," "business trust," or "common law trust," is an arrangement by which a number of persons known as **"trustees"** hold property for the benefit of others, known as **beneficiaries.** Parties to a trust are: (1) the creators; (2) the trustees; and (3) the beneficiaries.

This type of organization originally **arose in Massachusetts** where the law (prior to 1912) prohibited the organization of corporations for the purpose of dealing in real estate. Since a corporation is deemed to have continuous succession, it was feared that a landholding corporation might increase to such a size that it would be more powerful than the state itself. Owing to this prohibition the trust principle was adopted. These organizations were found convenient and effective and not subject to the limitations and requirements imposed upon corporations. The result has been that the trust form of organization has been extended to many other lines of business.

HOW CREATED.—Such trusts are created through the drafting and execution of a written instrument called a **"deed of trust,"** which describes the business of the association and defines the rights and liabilities of the trustees and the beneficiaries. The beneficiaries' interests in the trust are represented by certificates or shares generally called **units of beneficial interest,** which are similar to certificates of stock of a corporation.

The trustees agree to carry on the business under a trade-name and to organize with a president, treasurer, secretary and other officers. They hold office for a stated period, being replaced by others elected by the beneficiaries, who cast as many votes as they have units of beneficial interest.

ESSENTIAL PROVISIONS OF A TRUST FOR BUSINESS PURPOSES.—The essential provisions of any express trust organized for business purposes are:

1. **A deed or declaration of trust,** drawn up to define the rights and powers of trustees and shareholders.
2. **Two or more trustees** who are authorized to take over and manage the capital, business, or other property supplied by the shareholders.
3. **Shareholders** who are beneficiaries and who receive transferable certificates representing their respective interests in the profits and in the property on dissolution.
4. Provisions for **division of profits, appointment of trustees** to fill vacancies, and for **dissolution** at termination of the trust.
5. Provisions that no liability is to attach to either trustees or shareholders, but only to the trust estate.

ESSENTIALS OF DEED OF TRUST.—The deed of trust should set out the following essential information:

1. The trustees and the immediate beneficiaries must be designated, and provision must be made so that others desiring to be beneficiaries can come in and assist in making up the required amount of capital.
2. If any property is to be transferred to the trustees, or if they are to purchase any particular business or property, it must be designated and described.
3. The capital, if any, that is to be raised and paid over to the trustees must be specified, and its division into shares and the value thereof must be set forth. Both preferred and common shares may be prescribed.
4. The declaration must also state that the property acquired by the trustees is held in trust, and subject to the powers, limitations, and liabilities set forth in the instrument by which the trust is created.

DETAILED PROVISIONS OF DECLARATION OF TRUST.—The declaration of trust or trust agreement must specifically prescribe and set forth the following details:

1. The duties of the trustees.
2. The powers of the trustees.
3. What consent on the part of the shareholders is required for the exercise of any special powers by the trustees.
4. Any special limitations or authorizations of the trustees.
5. The remuneration of the trustees for their services.
6. Any directions for the financial management of the trust.
7. How and under what circumstances payments of profits or of the trust funds are to be made to the holders of common and preferred shares.
8. Directions, if any, as to the sale or transfer of any of the trusteed property.
9. The continuance of the trust for such term as may be allowed by law.
10. Provisions as to registry of shareholders, the issuance of certificates, and the transfer of shares.
11. That the trustees shall have no authority to bind any shareholder by contract or to call for any assessment from them.
12. That all persons dealing with the trustees shall look only to the trust funds and not to either trustees or shareholders for payment, and that every order, contract, or obligation entered into shall stipulate that neither trustees nor shareholders are liable thereunder.
13. Provisions for annual meetings, reports and audits, and for filling vacancies among the trustees, with rules for voting.

14. How special meetings may be called and how notice of them is to be given.
15. The name of the trust and how the trustees shall be known.
16. Provisions for any other details of the trust business and organization not already prescribed.

The declaration of trust must be signed by the parties interested, and in most cases will be acknowledged before a notary or other official. Care must be taken in preparing a trust that the power of alienation is not suspended, especially if any part of the trust estate consists of real property.

ADVANTAGES OF EXPRESS TRUSTS AND CORPORATIONS.—The express trust as a form of business organization gives the following advantages which are also common to the corporate form:

1. Neither shareholders nor trustees are liable in excess of their personal interest in the trust property.
2. The shares are transferable as are corporate shares.
3. Trustees can do business and manage the trust property as directors do with the corporate business and property.
4. For all practical purposes an express trust can be made as permanent as a business corporation. In most states a trust can be created for one or more lives and 21 years more.
5. It is dissolved by agreement as readily as a corporation.
6. An express trust can sue and be sued as readily as a corporation can.
7. Shareholders have a right to accountings and to all such information as is proper.

ADVANTAGES OF THE EXPRESS TRUST OVER THE CORPORATE FORM.—In the following particulars, it is claimed that the transaction of business under an express trust has advantages over the corporate form:

1. It can do business in any part of the country as freely as an individual or a partnership. In some states, however, the members may be held as partners.
2. It is not required to make out the reports, to take out licenses, and to pay taxes to the extent that is required of a corporation.
3. Under some conditions the permanence of management secured by a continued board of trustees is better than the plan of annual elections.
4. The trustees may ask for court guidance in cases where the rights or powers of the trust are unadjudicated or not clear.

INDIVIDUAL LIABILITY UNDER TRUST ASSOCIATIONS.—Great caution should be exercised in forming a Massachusetts trust. It is important that the deed be drawn by a competent attorney, since there is danger that **a faulty deed** may cause the shareholders and trustees to be held liable as partners.

The most important question in relation to this form of business association is whether the individuals concerned, both the trustees and the beneficiaries, are likely to be held to individual liability as in the partnership. It is a general condition of the law that those who are associated in business with others are personally liable for all obligations incurred in the operations of the business.

The vital question as to the trust associations is whether business can be done by trustees under a declaration of trust with freedom from individual liability.

Under the common law a trustee was held to be a principal, not an agent, and when he contracted as trustee, he bound himself personally. He had a

right to be indemnified from the estate if he became liable without negligence on his part. If he wished to avoid all this, he could do so only by expressly stipulating that only the estate and not himself was to be bound. The Supreme Court long ago laid down the general rule that, "If a trustee wants to protect himself from liability on a contract, he must stipulate that he is not to be personally responsible, but that the other party is to look solely to the estate." In later Maryland cases the courts have explicitly stated the rule that the trustee must stipulate that he is not to be personally liable, or he will be so held. In Massachusetts it has been held that where trustees signed a note "We as trustees, but not individually, promise to pay," they were not personally liable.

As a matter of precaution, most of the well conducted trusts that are in active business are particular to have printed on all of their stationery and in particular on all bills, orders, invoices, and any other instrument that may involve or partake of a contract liability, a full **disclaimer of all individual liability.** The following disclaimer is of this nature:

"The Hampton Company is the designation of a Board of Trustees acting under a declaration of trust dated December 30, 1909, and filed with the Northampton National Bank of Northampton, Massachusetts. Any contract made or liability incurred by them binds only the trust property in their hands, and neither themselves nor the shareholders, beneficiaries of the trust, shall be held to any personal liability under or by reason thereof."

Where this has been done, neither trustees nor shareholders have been held liable for anything beyond the money already invested in the trust. It is to be remembered, however, that trustees cannot avoid personal liability for torts or negligence.

The declaration **must not prescribe any control of the trustees by the shareholders.** If the shareholders are in any way to manage the business, they will make themselves liable as partners. On this account the beneficiaries must not by means of annual elections appoint the trustees. This would be management by the beneficiaries and they would be held personally liable as in a joint stock company.

CONCERNS ORGANIZED AS EXPRESS TRUSTS.—The following list shows some of the better known concerns organized under the trust form:

The Mackay Companies (Postal Telegraph)
Great Northern Iron Ore Properties
Texas Pacific Land Trust
Amoskeag Manufacturing Co.
Ludlow Manufacturing Associates
Massachusetts Gas Companies
Chicago City and Connecting Railways Collateral Trust
Chicago Elevated Railways Collateral Trust
North American Pulp and Paper Co.
Masonic Temple Trust (Chicago)
Montgomery Ward Warehouse Associates
Pepperell Manufacturing Co.
Massachusetts Lighting Companies
New Hampshire Electric Railways

SECTION 12

CONTROLLING INVENTORY INVESTMENT

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SECTION 12

CONTROLLING INVENTORY INVESTMENT

RELATION OF INVENTORIES TO FINANCIAL CONTROL.—The successful financing of a business demands close study of its **working capital requirements.** A certain amount of the company's capitalization must be invested in what is commonly termed **current assets.** The current asset requirement fluctuates with the character of the business, the general industrial and business trend, and with purchasing, production and sales conditions. Working capital which would be adequate for certain seasons of the year would be excessive in other months. If working capital is fixed for the maximum needs of a business, much of such capital will remain relatively idle and unproductive during portions of the year. Therefore, an intelligent estimate of an economical working capital is an essential duty of the financial executive.

There is **no fixed rule** for determining the amount of working capital which should be owned or the amount which should be borrowed. Obviously, the working capital should not be greater than that which can be used profitably It should be sufficient to protect the business against sudden depression and sharp price declines. It should also be enough to make an attractive financial position so as to permit borrowing when needed upon a favorable basis. Unused capital is costly and insufficient capital is dangerous.

QUICK ASSET TURNOVERS.—Any worth-while effort to establish working capital requirements involves a study of the turnovers of the quick assets and a thorough realization of the part played by the inventory and its relation to purchasing, production, sales and financial programs. The principal factors to be considered in reaching a decision regarding the proper amount of working capital are the turnovers of the receivables and inventories. The amount needed to carry customers' accounts may be approximated upon the estimated monthly sales volumes and the credit terms given, with due allowance for slow or bad accounts.

Where records are available, **the inventory turnover** may be ascertained by dividing the average inventory into the average cost of goods sold. These turnovers will differ much in various lines, but they should be somewhat similar within a trade or industry. Constructive analyses of turnovers often point the way to conserving capital and to needed improvements in purchasing, production and sales methods.

The control of the working capital position requires constant attention to these turnovers, and particularly, to the liquid condition of the investment in inventories. Careful watch must be maintained to see that unsuitable raw materials, large overruns, dead stocks, imperfect finished products, and the like, do not tie up a substantial part of the inventory investment for an indefinite time. The financial executive should insist that such items be liquidated promptly and on the best terms possible, and then take steps to correct the conditions which gave rise to such unprofitable use of the company's capital.

KEEPING RECORD OF INVENTORIES.—In most modern businesses appropriate accounts are provided to furnish the essential information regarding the inventories. The general accounts contain controls for the stocks of raw materials, goods in process and finished goods. The cost accounts supply the cost of all goods manufactured. Briefly, these accounts are charged with all materials and services which are purchased for or applied to manufacturing operations and they are credited with the costs of goods sold as ascertained by the cost accounts.

Perpetual inventories are successfully operated by many concerns, but perpetual inventories are not always practical and it is necessary at times to use **estimated inventory figures.** Whether perpetual or estimated inventory methods are followed, it is always desirable to have a **physical inventory** taken at least twice a year, and in some cases, continuously, so that any errors in the clerical work of the perpetual inventory or in the computations of estimated inventories may be disclosed and adjusted. The use of perpetual inventory records is increasing rapidly and is well worth the trouble and cost in most businesses. With well kept perpetual inventory records the value of stock on hand may be ascertained at any time. Estimated inventories are, at their best, but rough approximations and full allowance must be made for this condition in their application and use.

The importance of an exact knowledge of the amount and composition of the inventory investment cannot be exaggerated because in addition to being a vital factor in the company's working capital structure, the inventory is the basis of the determination of the results of the operations of the business. Statements of financial condition and income accounts are worth little if they are not founded upon correct inventory values. Monthly statements based on book or estimated inventories are usually viewed with a mental reservation regarding actual inventory figures and, in most cases, full confidence in financial statements of a business require that they be based on carefully prepared physical inventories.

INVENTORIES IN THE BALANCE SHEET.—Inventories of merchandise in a trading concern and of raw materials, supplies, goods in process and finished goods in a manufacturing company, are considered current assets when they are in a condition to be **convertible into cash** or its equivalent in the regular course of business and **within about one year.** It is not good accounting practice to include in current assets stocks of goods or any part of such stocks which cannot be converted into sales within one year. When the period of conversion is longer the values of such inventories should be segregated on the balance sheet. This general principle, however, is not rigidly applied to moderate stocks of replacement parts for the company's products in current use.

The annual balance sheet and income statement should be prepared at the close of the **natural business year.** If the completion of the year's activities does not come at the end of the calendar year, it is unwise, inconvenient and uneconomical to follow blindly the traditional habit of closing the accounts on December 31. The practical advantages of a fiscal period, nicely fitted to the seasons of each individual business, are obvious; yet many executives ignore such evident benefits and allow themselves to drift along with the old calendar year custom.

The natural and best time to end a fiscal year is when the **normal cycle of annual operations** has reached its most inactive position, or when periods of greatest production and shipment activities are over. At such times inventories are relatively low and many of the factory departments are closed down for necessary repairs, lay-out changes and the like. Inventories can be counted

and recorded with minimum effort and vastly reduced expense, forced shutdowns of productive departments are avoided, and the officers and employees have ample time to concentrate upon the work of the inventory and annual reports. The balance sheet at the end of a business year shows the best liquid position that it is possible to obtain under ordinary operating conditions. This element alone may determine **the attitude of a bank** regarding the extension or increase of a line of credit. In other words, the selection of a natural business year will save some money each year and may at some future time be the deciding factor in a decision of the greatest possible importance. There is no good or compelling reason for using the calendar year period when it fails to harmonize with the end of the natural business year.

GOODS ON HAND.—Inventories of the stocks on hand in manufacturing concerns should be classified primarily into:

Raw materials	Finished goods
Goods in process	Supplies

In some cases **another classification of scrap** is also desirable. Each of these main divisions should be subclassified so as to show excessive, unusable, damaged or obsolete materials, finished goods or supplies.

Raw Materials.—The raw materials consist of all materials rough, semi-finished, or finished articles which are provided as material entering into production.

Goods in Process.—The merchandise in process includes all materials delivered from store rooms to the production departments and all materials and products in the various stages of the manufacturing processes.

Finished Merchandise.—The finished goods are those upon which all manufacturing processes have been completed.

Supplies.—The supplies should consist of articles provided for consumption in the process of manufacturing, maintenance of the plant or comfort of the employees but which do not in any way enter into the product as production material. **Small tools, jigs, dies, gauges and other appliances** of the same general nature provided exclusively for the manufacturing processes are classed with supplies by some but most concerns consider such items as "special plant equipment."

OTHER INVENTORY ITEMS.—The following items should be considered as inventory and shown separately upon the balance sheet:

Merchandise pledged as collateral.
Merchandise in transit
Merchandise out on consignment.
Merchandise in foreign countries.
Advance payments on merchandise not received.
Merchandise which cannot reasonably be disposed of within a year.

Merchandise Pledged as Collateral.—Borrowing upon merchandise is a common practice with companies handling or using large quantities of commodities, such as wool, cotton, tobacco, coffee, sugar, canned goods, etc. This custom is utilized at times by industrial and commercial concerns who find difficulty in borrowing on their unsecured notes.

Usually the goods pledged as collateral on loans are **stored in warehouses** and the warehouse receipts therefor are deposited as collateral on loans. In some cases, however, loans are made on the **merchandise in the company's own store rooms.** In such cases the pledged stocks should be segregated or records

should be kept to clearly identify the pledged goods and to account for any withdrawals therefrom.

Merchandise in Transit.—The title to merchandise sold is vested usually in the purchaser upon delivery of the merchandise to a common carrier. As soon as merchandise is shipped, it becomes an accounts receivable of the seller and belongs in the inventory of the buyer. Hence, merchandise in the hands of public carriers or on receiving platforms awaiting inspection and count should be included in the inventory. It is incorrect practice to omit goods in transit from the inventory at the end of the fiscal period.

Merchandise Out on Consignment.—Statements of sales and the merchandise on hand at inventory date should be obtained from all consignees. The goods out on consignment should be priced upon the basis used for similar items in the inventory of stock on hand. If the consigned goods are in good condition and readily salable, freight, insurance and other accrued charges may be added to the basic inventory value.

If consigned merchandise is included among the assets of the consignee, a corresponding liability to the consignor must be shown. It is not customary, however, to show consigned merchandise on the balance sheet in this manner because it makes an unfavorable showing which is not justified by the facts. The goods held on consignment are not assets because they are not owned and no liability for the payment thereof exists until they are sold. The value of the goods constitutes capital which is loaned without any obligation to the consignee beyond due care.

When materials are received to be converted or fabricated for others, greater care is imposed upon the consignee but no direct liability exists which need be shown on the balance sheet.

Merchandise in Foreign Countries.—The merchandise held in foreign countries should be accounted for by the foreign branch offices in much the same manner as the goods on hand. **The domestic valuation** of such inventories should be based upon a study of exchange rates, custom duties, transportation, foreign market conditions, etc.

Advance Payments on Merchandise Not Received.—Payments on account of merchandise not received are often **charged to accounts payable.** If this custom prevails, the amounts so paid should be temporarily transferred at inventory time to an asset account so that the item may be reflected correctly in the company's financial statement. The advances are against a future liability and will be replaced ultimately by inventory, hence it is incorrect to reduce the total of the company's current liabilities to trade creditors by the amount of such pre-payments.

Merchandise Manufactured under Sales Contracts.—When articles are produced under enforceable sales contracts, the semi-finished and finished goods on hand may be included in the inventory at cost, unless it is apparent that costs are higher than the net amount realizable from the contract price.

Merchandise Held on Consignment.—Merchandise received on consignment becomes in reality a source of capital because the consignor supplies the part of the working capital of the business. The consignee does not have title to this merchandise but is responsible for its custody and it is usually necessary for him to take periodical inventories of merchandise on consignment in order to make proper accountings to the consignor.

PURCHASE COMMITMENTS.—When purchase commitments are normal and at prices which are substantially in accordance with prevailing market

quotations, the total thereof need not necessarily be shown on the financial statement. It is a good practice, however, to note the total of the purchase commitments so that the management may have this information for use in connection with its plans for future financing. During **periods of drastic price declines,** purchase commitments must be given special attention, because if they are at prices materially above current ones, they are the source of losses and real liabilities. Under such conditions all the pertinent facts regarding such commitments should be shown on the company's financial statement and **adequate reserves** should be made for the probable losses arising therefrom.

INVENTORY TURNOVER.—Turnover as applied to inventories is the completed cycle of turning capital invested in merchandise, carried for the purpose of conducting a business, into cash, negotiable paper, accounts receivable, or other valuable consideration. **Rate of turnover** is the number of times the cycle has been completed in a given period. The return on capital used increases with the rate of turnover, assuming that the margin of profits on sales is not diminished.

Profits are derived from the sales of services and/or commodities. Hence the turnovers of the inventories are most important factors in profit realizations and price fixing. Most industries have normal turnover periods and any concern in the industry that fails to effect the average turnover rate will not realize its full profit possibilities. In highly competitive lines the **narrow profit margins per unit** demand rapid turnovers in order to produce fair returns on capital invested. Those who understand the effect of frequent turnovers are often able to sell at more attractive prices than their competitors and thus secure the volume needed for economical and low cost production operations. **Selling prices** should be fixed with a careful regard for the estimated rate of turnover.

USE OF TURNOVER.—Inventory turnover should be used by the financial executives as an index to the flow of material and labor into production and its conversion through sales into cash or its equivalent. Wherever possible the turnover of the business as a whole should be supplemented by **departmental turnovers** as a means of controlling inventories and locating obstructing departmental conditions. Where several lines are carried, the turnover of the business as a whole is often deceptive, and the turnover of each product or division should be obtained.

It is seldom found that the limitation to quicker turnover has really been reached. Intensive studies of the human factor, the processes of manufacturing and sales methods, generally disclose means for improvement.

TO FIND TURNOVER.—The following is a rule for ascertaining turnover: To ascertain the turnover, take the starting inventory, add the cost of manufactured or purchased goods, and deduct the inventory at the end; divide the total by the starting inventory. The calculations are based upon a normal inventory. The result is the number of times the capital invested in stock-in-trade has been turned over during the period. In the event that the value of the inventory varies considerably throughout the year, or in case of a continuous increase or decrease in the volume of business which might have a corresponding effect on the inventories, a more accurate method of determining the turnover would be to use the average inventory instead of the starting inventory.

Most **American accountants** figure turnover on the basis of cost, i.e., they regard turnover as the number of times the normal stock-in-trade is reinvested in the goods sold. Many **British accountants,** on the other hand, say that turnover is the number of times the inventory is contained in the sales. It is

evident that when two or more businesses are compared, it is very important that the turnover be determined for all on the same basis.

Some authorities suggest **working capital as a basis for turnover.** This is the excess of current assets over current liabilities. Thus, if the excess of current assets over current liabilities is $25,000, and goods are sold during the year which cost $150,000, the working capital is turned over six times, and this may be said to represent the turnover. If a large amount of working capital is used for advertising purposes, it follows that it cannot be used to purchase goods to be sold. The same is true if a large amount is locked up in accounts receivable. The result of either of these is a lessened turnover of working capital. When the opening or normal inventory is made the basis, the turnover may remain the same although the volume of business is on the increase or decrease, because the inventory increases or decreases with the expansion and contraction of business.

Walton and Finney make the following statement regarding the use of working capital as the basis for the reckoning of turnover:

"The use of working capital as the basis of turnover is logical, first, because the capital is put in the business for the purpose of being turned over as rapidly as possible; second, because it is virtually constant; and third, because it presents all the elements concerned in the turnover, not only the stock-in-trade, but also the accounts and notes receivable, by means of which the turnover is effected. The turnover of working capital also furnishes a better criterion of the excellence of the management. If a manager uses working capital as the standard, he makes his best record by diligence in collecting outstanding accounts, and increasing the supply of cash for the development and handling of a more extensive business."

CALCULATING THE RATE OF INVENTORY TURNOVER.—The rate of turnover must be computed with due regard for the standards used in each line of business. Some use the unit of production as a basis, others use the investment in inventory. This latter basis, being applicable to most businesses, will be considered here.

1. Merchandising.—The rate of turnover of a merchandise inventory may be ascertained by either of the following methods:

Cost method. The monthly average of the cost value of the inventory carried during a period divided into the cost of sales. The average value of inventory is usually found by adding to the value of inventory at the beginning of the year, the value of the inventories at the end of each month, including the inventory at the end of the period, and dividing the total by the number of inventories.

Retail method. The monthly average of the retail value of the inventory carried during the period divided into the sales (used by some department, retail and chain stores). The retail method shows the turnovers of the stock, but it does not reflect the turnover of capital invested in inventory because both the retail values and the sales prices contain fluctuating profit factors.

Seasonal Classification by Department Stores.—When the merchandising activities are subject to seasonal and style influences, the turnovers of each department should be watched closely. The turnover calculation, however, does not disclose slow moving stocks or the percentage of sales made from the current purchases.

To control this factor, the inventories of the various departments should be classified according to seasons of purchase so that turnovers of the older season's goods may be ascertained and accelerated, by price adjustments or the like.

2. **Manufacturing.**—In manufacturing concerns it is desirable to ascertain the turnovers of the raw material, goods in process, finished merchandise and supplies. The rate of **turnover of raw materials** is determined by dividing the average of inventory into the total value of the materials used in the manufacturing processes during the period. The **turnover of the in-process stock** is obtained by dividing the average inventory of merchandise in process into the total amount credited to merchandise in process account for the period. The **turnover of the finished goods** is found by dividing the average inventory of finished merchandise into the total cost of sales. The **turnover of the supplies inventory** is shown by dividing the average inventory of supplies into the total amount of supplies used during the period.

ALLOWANCE FOR SPECIAL STOCKS.—In computing turnovers due allowance should be made for **special or abnormal purchases.** Occasionally large quantities of material are purchased to take advantage of unusually favorable conditions. Sometimes a year's supply or even more may be so acquired. If the normal purchases are confined to three months' supply, it would be misleading to include the abnormal purchase in the calculation of the turnover rate. In fact, such a transaction is either a capitalization of purchasing judgment with available funds or pure speculation, and neither of these is a true normal manufacturing or merchandising operation.

ILLUSTRATION OF ADVANTAGES OF QUICK TURNOVER.—The advantages of quick inventory turnover are illustrated in the following summary:

	A	% to Cost of Sales	B	% to Cost of Sales	C	% to Cost of Sales
Working capital	$150,000		$130,000		$150,000	
Average inventory	100,000		80,000		100,000	
Sales	$500,000		$494,800		$675,000	
Cost of sales	350,000		350,000		500,000	
Gross profits	150,000	42.86	144,800	41.37	175,000	35.00
Operating expenses	120,000	34.28	118,800	33.94	130,000	26.00
Net profits	$ 30,000	8.58	$ 26,000	7.43	$ 45,000	9.00
Rate of inventory turnover	3½ times		4⅜ times		5 times	
% Net return on working capital	20%		20%		30%	

Example A shows a condition before adopting quick turnover. Example B shows a condition after adopting quick turnover and using the turnover to reduce inventory. The gross profit is reduced 1.49%, the net profit is 1.15% less than A, but the net return on the reduced working capital is the same. Example C shows the condition with a quick turnover at lower prices, and the increased volume of sales is offset somewhat by higher operating expenses and smaller gross profits, yet the net profits are 50% greater than in either examples A or B.

GROSS PROFITS ON SALES IN RELATION TO TURNOVER.—The margin of gross profit on sales is very important. If the gross profit is insufficient to cover the business expenses, and if such expenses advance in proportion to increases in sales, an increased turnover would produce **larger losses.**

Illustrations.—Assume that the company has an invested capital of $500,000 and the following conditions:

	A	% to Cost of Sales	B	% to Cost of Sales	C	% to Cost of Sales
Average inventory value...	$200,000		$200,000		$200,000	
Sales.....	$720,000		$960,000		$960,000	
Cost of sales.....	600,000		800,000		800,000	
Gross profits.....	120,000	20.00	160,000	20.00	160,000	20.00
Expenses.....	150,000	25.00	200,000	25.00	160,000	20.00
Net loss.....	$ 30,000	5.00	$ 40,000	5.00	No loss	
Rate of turnover.....	3		4		4	
Loss on investment.....	6%		8%		None	

Example A shows an inadequate percentage of gross profit before increasing turnover rate. Example B shows an increase in turnover with the same percentage of gross profits maintained and expenses increased in proportion to sales. Example C shows the same gross profit and sales but expenses did not advance in proportion to sales.

INVENTORY CONTROL.—The control of inventories is an **essential part of the control of finances.** The co-ordination of the various functions necessary to keep the inventory investment as low and as active as practicable is an important factor in securing a satisfactory return on the invested capital. The control of the investment in inventories requires good organization and suitable records. The **underlying principles** of control are the **same for all businesses,** but their application must be fitted to the particular nature and size of each concern.

OPERATIONS AFFECTING INVENTORY CONTROL.—The control of the inventory involves a coordination of the purchasing, production, sales and stock-keeping activities. Purchasing includes ordering, contracting and receiving; producing includes the fabrication of material or development of resources; selling includes ordering out and shipping; and stock keeping includes the receipt and recording of all purchased and finished goods. The sales are the controlling factor and purchasing and production should be planned and timed to meet the expected volume of sales.

BASIC INFORMATION NECESSARY FOR INVENTORY CONTROL.—The basic facts required for inventory control are:

1. The actual sales or consumption.
2. The expected or estimated consumption of each class or kind of merchandise in a given time based upon unfilled orders and sales forecasts.
3. An accurate and available record of the quantities of each kind or class of merchandise on hand.
4. The actual receipts of merchandise.
5. The quantities on order.

BASES AND POLICIES AFFECTING INVENTORY CONTROL.—Definite bases and flexible policies are necessary as guides for control. The most important of these are:

1. Minimum inventory investment for effective operation of the business.
2. The minimum quantity of the inventory at which replenishment is necessary.
3. The quantity necessary for sales in the usual course of trade.
4. The policy in regard to size of purchase units.

5. The policy in regard to disposal of slow moving items.
6. The policy in regard to extraordinary increases and decreases in stock.

MINIMUM INVESTMENT NECESSARY FOR EFFECTIVE OPERATION.—In establishing the minimum necessary investment all factors relating to the business should be considered. The result should be a practical basis sufficiently flexible to meet the varying business conditions. The stock should be sufficient for production needs and to meet normal demands of customers. It should also allow a fair margin of safety for delays, strikes, breakdowns and the like.

The establishment of a minimum inventory investment involves the consideration of the following:

The completeness of assortment, parts, sizes or kinds (the "balanced" inventory).
The time which ordinarily elapses between ordering and receipt of merchandise.
The types of merchandise used, that is, staples, specialties, novelties or seasonal goods.
Obsolete and slow moving merchandise.
Excessive or disproportionate quantities.
The storage and stock space available.
Over-production or scarcity at sources of supply.
Rising or falling market due to general business conditions and the economic trend.
The production period or the time required in each process of manufacture. The limiting factor of manufacturing is usually found in some one process.
Time required to ship merchandise from stock.
Material necessary to produce single unit.
Quantities of merchandise usually sold in a given time.
Quantities scheduled to be sold through special effort or sales campaign.
Market conditions in regard to demand and competition.
Margin of safety.

USE OF RECORDS AND RATIOS.—Previous records and inventory statistics in themselves are of minor significance, because they may reflect abnormal or subnormal conditions. But when such data are used with good judgment and due consideration of all factors affecting them, they serve as a good working basis for establishing minimum requirements. The following is an illustration of how inventory statistics may be used and of the necessity for considering all pertinent factors:

	Average Inventory	Sales	Ratio of Inventory to Sales
1921.....	$10,000	$30,000	1 to 3
1922.....	15,000	50,000	1 to 3.33
1923.....	30,000	60,000	1 to 2
Present inventory.....	$30,000		

The above figures indicate that during the year 1921 the average inventory was equal to 4 months' sales and that in 1923 the inventory was sufficient to take care of customers' requirements for 6 months. Such an increase in inventories should cause investigation on the part of the financial management. The increase may be due to the accumulation of slow moving or obsolete

merchandise or to inflated inventory values. On the other hand, the increase may have arisen from an accumulation of supplies and merchandise at favorable prices, or from large purchases of goods of which a future shortage is expected.

CLOSE CO-OPERATION HIGHLY DESIRABLE.—Close co-operation between the purchasing and the sales and operating departments is necessary to secure the advantages of intelligent and economical purchasing. The index of trade tendencies is of vital significance to the purchasing department.

STOCK-KEEPING AND RECORDING IMPORTANT.—Properly kept stock records are needed to show the changes in the structure of the inventory, and to disclose unbalanced stocks, obstructing dangerous accumulations and actual shortages.

THE POINT AT WHICH REPLENISHMENT IS NECESSARY.—Under normal conditions the replenishment point is reached when the quantity on hand is equal to or slightly more than the quantity which will be consumed or sold during the period required to order and actually receive a new supply.

THE POINTS AT WHICH SALES ARE EXPECTED.—In **manufacturing** staple merchandise sales may be expected when the merchandise is finished and ready for shipment. In **seasonal goods production,** the sales periods are not reached until the opening of the buying season. In such cases merchandise must be accumulated in order to supply the markets, preserve the organization of the factory and make the fullest use of the buildings, machinery and equipment. In **mining or other development of natural resources,** the point at which sales may be expected is usually dependent upon market conditions and financial strength of the concern.

THE POLICY IN REGARD TO SIZE OF PURCHASE LOTS.—In the normal operation of a business purchases are made in quantities which have become recognized as regular but under abnormal conditions the application of sound judgment usually regulates the size. The availability of the merchandise and the variance in costs of large and small lots are important factors in the establishment of the standard quantities to be purchased. Ordinarily it is a good business practice to **standardize purchase lots.**

CONTROL IN MANUFACTURE OF SPECIAL MERCHANDISE AND CHANGES IN DESIGN.—Where special merchandise is produced, **analyses of the orders** are important to determine the frequency of repetitions of the same items and the economical run of parts common to several items.

Before changes in design are made effective the inventory of the stock to be superseded should receive careful study. In this connection the following conditions should be weighed.

Relation of unfilled and anticipated orders to stock of finished merchandise on hand.

The storage space required for merchandise accumulated during an extended period of distribution and the loss incidental to immediate disposal of such merchandise which is finished.

Quantity and balance of stock on hand, on order and in process.

Possible use of special stock in the contemplated changed design.

Possible use in some other article.

Quantities required to carry on manufacture to the point at which the change will be effective.

Other factors which influence decisions to change designs not coming directly under inventories as defined in this section, but which cannot be dissociated with the financial control are:

Utilization and adequacy of the present machinery and equipment.
Necessity of changes.
Excessive machinery facilities, etc.

DISPOSAL OF SLOW MOVING GOODS.—The establishment of a **definite policy** for the disposal of dormant stock due to lack of demand or because of unfavorable prices, obsolete types, styles or sizes, is very desirable. Drifting is costly. The sale of such goods at a sacrifice of a part or all of the profits thereon, in order to free capital and space for more active employment has been found a sound profitable procedure. No business can afford to lock up capital in "souvenirs."

VALUE OF BUDGET SYSTEM IN INVENTORY CONTROL.—General budgetary control, as explained in the Budget Section, provides definite objectives for sales, receipts, expenditures and profits. With definite monthly sales quotas, the **timing of the purchasing and production** may be fixed with fair precision. Standard inventory quantities, and estimated shipments are compared frequently with actual inventories and shipments, and significant changes are disclosed promptly.

CLASSIFICATION AND SYMBOLIZATION.—Classification and its expression by means of symbols is an important feature of inventory control. It should be reduced to a unified system. This necessitates a careful grouping of all activities. The accounting records usually give an insight into the fundamental activities; therefore, fundamentally the system of classification should follow the order of accounts shown in the general ledger. All items being grouped under their proper classification, each item should receive a distinctive symbol and description, and each should have a distinctive place in its own group. Within groups the plan of classification must be determined upon a logical basis.

A **symbol** is a concise form of accurate description of a given object, and usually consists of letters, or numbers, or both. Symbolization consists in the permanent identification of the elements in the final classification. It is an important step in standardization of materials.

Symbol systems may be based on letters or on numbers. Those based on numbers are similar to the **Dewey decimal system.** It is preferable, for inventory classification, to use a combination of the two. The **numerical system** permits of the 10 basic classifications. The **alphabetical system** permits use of 23 letters, I, O, and Q not being used because they resemble numerals. Each item must be represented by but one symbol, and each symbol must represent but one item. If possible, symbols should possess suggestiveness, as, S for supplies, etc.

Standardization of stock or stores must precede their symbolization.

The establishment of **control accounts** must be based upon a logical classification of **stores ledgers.** A possible division of the stores ledger would be: general stores, component part stores, finished product stores, and by-product stores; but specific conditions must govern. Corresponding **controlling accounts** should be set up in the general ledger. Charges to this general ledger control account are made at the end of each accounting period, postings being from the purchases journal or voucher register, whereas entries in the subordinate ledger may be posted from vendors' invoices.

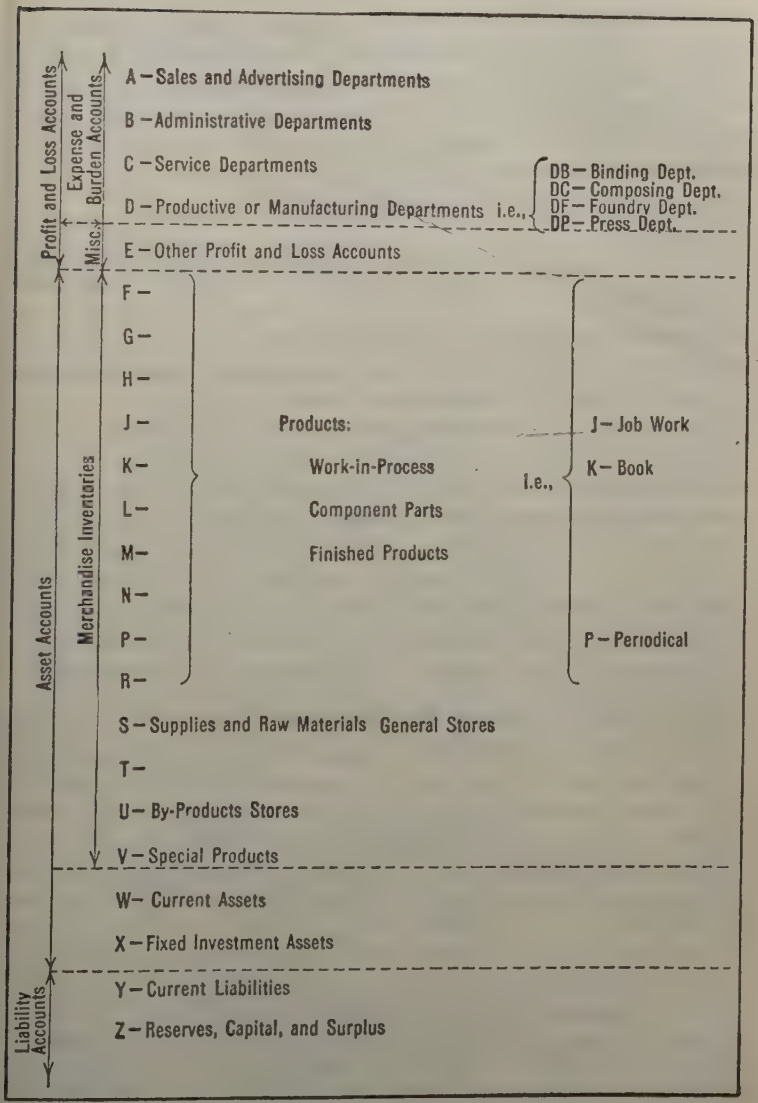

Chart showing Classification and Symbolization of Main Accounts
(From Madison Cartmell's "Stores and Materials Control")

PROCEDURE FOR SYMBOLIZATION.—The accompanying chart shows the basic classification of main asset and liability accounts. Letters of the alphabet symbolize the main classification. Numerals should be used to denote subclassifications or such as cannot be effectively represented by means of combinations of letters. Note that S symbolizes the general asset account, Supplies and Raw Materials, and D represents productive departments. Therefore, SD symbolizes supplies for a productive department. Similarly other combinations may be used, as:

SA – Supplies for sales and advertising department.
SJ – Raw material for job work only.
ST – Tools.

Each of these general classes permits of further subclassification. Thus if SC represents service department supplies, then within this departmental classification:

SCJ – Supplies used by janitor's department.
SCS – Supplies used by shipping department.

The shipping department uses binding materials, as, string, cord, rope, and gummed paper tape. These may be symbolized:

SCS1B – String used by shipping department to bind packages.
2B – Cord used by the shipping department to bind packages.
3B – Rope used by the shipping department to bind packages.
4B – Gummed paper tape used by shipping department to bind packages.

PERPETUAL OR BOOK INVENTORIES.—Perpetual inventory and stock records are kept for the purpose of showing continuously or at the end of short intervals the quantity and value of the inventory on hand. The **inventory items** may be classified according to departments, kinds of merchandise or locations. As such records are the result of recording receipts and withdrawals, their accuracy depends upon the correctness of the entries which are made. Generally such inventories do not reflect the physical condition of the merchandise. In some cases the stock records are kept in quantities only, but the better practice is to keep the record in both quantities and values.

ADVANTAGES OF STOCK RECORDS.—Stock record sheets sometimes provide for maximum and minimum limits to prevent tying up of too much capital in stock. Not only must quantities of materials be sufficient, but deliveries must also be kept ahead of requirements in factory or salesroom. Stock records facilitate checking of receipts of stock against purchase orders or special contracts. Sometimes materials are contracted for long before delivery. In such cases it is especially important that the contracts be checked against the stock records to prevent malpractice in pricing of goods purchased. A good stock record system aids in elimination of wastes which occur when no systematic method of recording stock transactions is in effect. It facilitates bidding on contracts because immediate reference can be made to past costs. It aids in the settlement of fire loss insurance. Although book inventories carried at cost prices may not represent market prices at time of fire, they give invaluable evidence of quantity and value of losses. They aid in reduction of obsolete stock because they show date of receipt of stock and thus permit determination of age of different classes of stock. Financial statements can be prepared monthly and on a more scientific basis when book inventories are employed than when dependence is placed upon physical inventories or upon estimates.

PERPETUAL INVENTORY RECORD.—The form of the perpetual inventory record must be designed to suit the particular needs of the business. A form which has been found quite satisfactory is described below.

Amounts received are brought into the Amount Received column and carried over and added to the previous balance in the Amount on Hand column. The price per unit of the amount received is entered in the Price per Unit column. Entries for succeeding receipts of material are similarly entered. When material is issued on requisition, the amount is entered in the Amount Issued column, and deducted in the Amount on Hand column. The price of valuing the material issued is taken from the Price per Unit column of the first line not checked in the second "Ck." column. This process is continued until the first amount is exhausted, after which the price is taken from second unchecked line in the Price per Unit column, and so on. Sometimes the requisition will exhaust one amount in the Amount on Hand column and require the taking of a part of the next. In this case the two prices may not be the same. The quantity requisitioned must in this case be split into as many parts as there are different prices and be priced accordingly. By this method calculations are simplified, and the total amount on hand is always shown. Any unused balance of a quantity received may be shown in pencil to simplify its use in connection with the quantities which follow. Materials should be issued on requisition at the same price at which they are charged when received. This price may be secured from the invoice or from the duplicate of the purchase order, providing it shows the correct price.

Points to be noted in connection with this stock record sheet are:

1. Running totals
2. Requirements and ordered
3. Appropriated
4. Received
5. Issued

The **merchandise stock book** is another form of stock record. On the debit side of this book are shown quantities purchased, cost per unit, and value in money. On the credit side are shown quantities sold, cost per unit, and amount of sales expressed in dollars and cents. A third or balance column is provided in which are shown quantities remaining, cost per unit, and money value. If prices are subject to fluctuations provision should be made for showing average cost.

The following is an outline of the data which it is desirable to have shown on the stock ledger or book:

1. Description of material.
2. Factory requirements for each kind of material.
3. Quantity on hand, or order, and allotted to production.
4. Quantity to be ordered when time comes to procure a new supply, by production or purchase.
5. Unit price at which the particular item of store is to be priced on requisitions.
6. Quantity consumed during given periods.
7. Value of stock on hand.

This information serves the following purposes:

1. Scientific planning of purchasing and production.
2. Enables factory manager to meet requirements of sales department.
3. Eliminates errors in ordering.
4. Reduces dead stock to a minimum.
5. Avoids excessive inventories.
6. Aids purchasing, by means of statistics of requirements.
7. Aids financial control, by affording a running inventory.

PHYSICAL INVENTORY.—All business concerns find it desirable to take physical inventories periodically. Perpetual inventories do **not eliminate the need of physical inventories,** because it is practically impossible to avoid errors and omissions in such records, and physical inventories are needed to correct and adjust such errors. Moreover, perpetual inventories do not disclose the exact condition of the stocks, and a physical inspection and count is needed to check the quantities which should be on hand and to determine the deteriorated or damaged stocks. Physical inventories should be taken as often as useful and practicable. They may be taken **periodically or continuously.**

Physical inventories are the actual count and determination of the value of the merchandise owned. Inventory time should be **the "clean up" time of business.** Every effort should be made to locate all unusable or unsalable stocks. Inventories taken in a casual and haphazard manner, and priced in a hit or miss way are of but little value for any purpose.

The taking of a physical inventory should be carefully planned. The chances for serious errors and omissions in the physical counts and valuations are so great that modern management finds it necessary to give very close attention to the arrangements for the taking of inventory.

Under the continuous method a separate organization is held responsible for a constant count, inspection and report upon designated parts of the stock. In large businesses the taking of the periodical inventory is worked out so as to reduce the task and to proceed in an orderly and logical way.

INVENTORY ORGANIZATION.—A special organization and a well considered plan should be formed for the taking of the **periodical physical inventories.** The financial head should be responsible for the plan and its execution, and for the selection of a capable employee to take general charge of the work. Assistants to direct and supervise the actual count and recording in the various departments or divisions should be chosen carefully, and proper preparation should be made in all departments affected by the inventory taking. Written instructions should be issued to all division heads.

The **written instructions** should cover the time at which the inventory is to be taken, the close-down period, the physical preparation of plant and stock rooms, the method to be used in taking the inventory, the persons in charge of the various divisions, the general classes of articles to be taken, and the like. The instructions should also include the procedure to be followed in the final compilation of the inventory and the accounting and cost departments' routine in connection therewith.

PREPARATION FOR INVENTORY TAKING.—The proper preparation of the various departments for inventory taking is most essential. The financial executive should see that each department is fully informed regarding the scope and character of the work it needs to do in this connection.

Purchasing Department.—The purchasing department should be instructed to verify and pass on to the accounting department all **invoices** covering material received up to the inventory date, and to submit **lists of all items in transit** and of all **materials received** for which invoices were lacking at inventory date. All invoices in dispute should be promptly adjusted and passed to the accounting department.

The purchasing department should be held responsible for **a record of all materials, patterns, tools, etc., in the possession of outside fabricators,** and be required to obtain statements from the vendors regarding such items on hand at their plants. They should also obtain a list of materials received and shipped

by outside vendors and fabricated by them during the months preceding the inventory taking.

Accounting Department.—The general accounting department should be instructed to **reconcile all statements of accounts** received from the vendors with the books and to adjust any differences that exist between the vendors accounts and the company's records. **Lists of all goods billed prior to inventory date** which are still awaiting shipment and of all goods out on consignment should be prepared. The department should see that all **material transactions** are properly recorded against the respective accounts and that the **labor distributions** are balanced with the payrolls and charged to the proper production orders. All **price records** should be brought up to date and all expense standing orders should be closed.

Production Department.—Prior to closing the plant for inventory, the production department heads should see that all **manufacturing orders** are balanced with material so that there will be no orders in the shop not covered by material and no materials in shop not covered by orders.

No **delivery or receipts of materials** from shop should be permitted while the inventory is being taken. **Shipments of goods** should not be permitted while the plant is closed down for inventory.

The plant should be swept clean and particular attention should be given to corners and spaces underneath benches and machines. All loose material should be pulled into aisles to be inventoried. The **salvage department** should dispose of all goods possible and have the scrap material in shape for inventory. All **goods or production orders in process and in a semi-finished state** should be listed accurately and so as to show the last operation completed thereon. All **tools, gauges, etc.,** should be placed in properly indentified cribs, and all outstanding tools should be called in. All work in process in the tool manufacturing department should be tagged with its order number and description. Decisions should be obtained from the inspection department of all defective or doubtful parts and all parts considered defective should be delivered to the salvage department.

Store Rooms.—The store rooms should have all materials in their possession properly stored and labeled for easy identification and count.

TAG METHOD OF TAKING INVENTORY.—In the larger companies the tag method of inventory taking is now **in general use.** A form of tag made with a light paper first sheet and a tough paper or manila duplicate, with a perforated stub, numbered consecutively, is generally used. The tags are made with spaces for all necessary information, such as the name, the location, the condition, kind, size and quantity of the goods, and the shop numbers of orders in process. All tags should be under the control of a designated person, and a careful record should be kept of the tags delivered to departmental inventory supervisors.

The tags should be prepared and attached to the stock by a section of the inventory organization commonly classed as **"tag writers" or "counters."** After a sufficient number of cards have been so prepared, they should be checked by another group known as **"checkers."** When all stock in a department has been counted and checked, and the **departmental inventory supervisor** has satisfied himself that everything has been properly tagged, the condition should be reported to the general inventory supervisor. No tags should be pulled until instructions are received from the general inventory supervisor.

When the word or signal is given for the pulling of the tags, they should be detached and delivered to the floor supervisor. The stub of the manila copy

should be allowed to remain upon the stock for subsequent identification, if necessary, until the entire inventory is completed.

The departmental supervisor should have the original and duplicate of every tag charged to him. No tags should be destroyed or loaned. Unused or spoiled tags must be delivered together with the good tags. The first copy of the tag should be detached at the time the tag is written, and held by the departmental supervisor as a guide to the location of any tags which may be missing at the time the manila tags are pulled. After the tags are detached, they should be delivered by the departmental supervisor to the general supervisor, or the person he designates for this purpose. The tags should then be checked to ascertain that all are accounted for, after which they should be sorted by part number or commodity, and summarized upon inventory sheets. All good tags should be entered on inventory sheets under proper classification. The inventory sheets should be numbered consecutively, totalled separately, and summarized according to desired classifications.

The tags, or duplicate inventory sheets, should be turned over to the cost department for valuation, and for checking quantities against perpetual inventory records and records of manufacturing orders. In extending the valuations of large inventories, comptometers or other computing machines can be used advantageously, and all the calculations, however made, should be checked by a different group of clerks.

INVENTORY VALUATION.—In determining the values of inventories the application of sound judgment and experience plays a most important part. The mechanics of inventory taking can be arranged to determine correctly the quantities and conditions of the stocks, but the valuation of these constitutes the main purpose of an inventory. The pricing of the inventory is **not a purely routine matter,** because there are several conditions affecting values which must be weighed and reflected in the inventory prices. The standard adopted for valuation must be flexible enough to cover the true situation.

The value of anything depends upon relevant conditions existing at the time of valuation. Valuations are usually influenced by several factors, among which are the following:

Market value—which is the index of supply and demand, actual and potential.

Actual costs—purchase price and transportation expense paid for materials and the actual material, labor and overhead costs of in-process and finished products.

Purpose of valuation—whether for liquidation, for selling or buying in the course of trade, for measuring compensation, for taxation, etc.

Physical condition—in regard to both depreciation and obsolescence.

Mental attitude—of business men in regard to general conditions.

From a financial point of view a profit cannot be realized until a sale is made. Therefore, the stock on hand should be valued **at cost, or market price if lower than cost, or even at a price lower than either** if general economic conditions point to probable rapid deflation of high costs and high market values. Some successful business executives adopt a low base price for inventory valuations, and others establish substantial **reserves against inventory shrinkages.** Even though the trend of the market definitely indicates that the merchandise may be sold at an abnormally large profit, a true financial position can be reflected only by pricing inventories at cost. If priced at market,

when market is greater than cost, the mark-up on inventories should be segregated as **"Unrealized Gross Profits."**

The market price should be the realizable value in the current active market. It should represent the cost of replacing in a free market the particular quantity and kind of goods on hand. Small or broken lots should be priced at the purchase price for small lots and not at carload lot prices. When current market quotations are not available because of temporary or seasonal inactive conditions, recent purchases or sales in fair volume may be used. When market quotations are merely nominal because of general trade conditions, an effort must be made to ascertain or anticipate the realizable market values for the quantities on hand.

COST BASIS OF VALUATION.—The term **cost** means the actual factory cost of production and the actual cost of material and supplies at their respective locations. The cost of production is made up of the actual cost of materials, supplies, labor and the proportion of overhead expense applicable to the product. **Overhead costs** should not include interest on investment, selling expenses, taxes or general administration expenses. **Transportation charges** may be included in costs but **storage charges** should not be added unless storage is a process which adds to the value of the merchandise. **Duty, freight, insurance** and similar charges on imported merchandise should be included in costs.

Under normal conditions, when the actual cost of the raw materials can be kept, little or no difficulty is experienced in their valuations. When various lots of similar goods cannot be identified, their **average cost** may be used. Where there is considerable variation in costs and sizes of the various lots purchased, it is important that an average cost and not an average price should be used. When actual costs rise sharply during the period immediately preceding inventory date, the average cost over a longer period should be used.

Another method is that of using the **latest invoice price** for as much of the total quantity appearing on the inventory as equals the quantity on the invoice, and the remainder, if any, is priced at the cost of the merchandise purchased next previously.

RULES FOR INVENTORY VALUATION.—Value, not cost, is the **inventory criterion.** It is not always possible to secure trustworthy market quotations for important parts of the inventory. The question of actual value includes much more than inquiry into market unit prices, and complete dependence should not be placed on market quotations for apparently the same goods or materials as those in the inventory. Unit cost figures and unit market prices are only a few of the factors that must be considered in arriving at inventory valuations.

The term "market basis" applied to inventory means the **cost of replacement or current purchase prices** prevailing at the time of the inventory for merchandise in the volume which is ordinarily purchased.

Inventories should be valued at cost or market prices when there have been no substantial fluctuations in selling prices or costs during the preceding fiscal period and in so far as the results fairly reflect conservative values for balance sheet purposes. In normal times cost and market prices are practically the same; the term "market" is synonymous with replacement cost; therefore, when there have been no radical fluctuations in values or methods, original cost and replacement cost are the same, or so nearly the same that the rule of **"cost or market, whichever is lower,"** is a satisfactory one and does not deceive those who use balance sheets. When some other method is required

to produce fair values for balance sheet purposes, good practice sanctions the substitution of one of the following methods:

1. It is proper to value inventories, or portions thereof, **at more than cost** and in some relation to net sales prices, when:

(a) Costs are **difficult to determine** due to inherent difficulties, such as occur when several commodities are produced from one process, or due to accounting difficulties which occur when raw materials are bought at widely fluctuating prices, etc.

(b) Costs are **substantially below replacement** costs.

(c) **Firm sales have been made** and cancellations are definitely deemed to be improbable, whether or not market prices are advancing.

In (a), (b) and (c) the unrealized profits and the asset accounts arising therefrom must be separately stated in the income account and in the balance sheet.

2. It is proper to value inventories, or portions thereof, **at less than cost or market,** when there is what is believed to be **inflation of current or replacement costs.** The balance sheet must show the basis of valuation, which presumably will be an estimated past or future replaceable value as distinguished from temporary costs.

3. It is proper to value inventories at cost, even though cost is higher than market, when:

(a) Basic commodities or staple goods are temporarily **quoted at less than the fair costs of production.** This exception must be strictly construed. There must be an honest belief that the decline below cost of production is only temporary. Even then it is easy to make mistakes. It is permissible to assure that basic materials never remain below cost of production for any extended period of time: but costs of production also decrease. The latter facts must not be ignored.

(b) Raw materials or other goods have been **purchased at higher prices than those existing** at the date of closing, and such purchases are allocated to contracts or notes which are not subject to cancellation, the contract on sales prices of which are based upon the high cost of such raw materials. It must be borne in mind that such temporary decline may develop into a permanent market decline, and wherever the above basis is used for inventory valuations, it should be clearly so stated in the balance sheet.

In both of cases 3 (a) and (b) the balance sheet must show the basis used. Apparent market prices are ignored in both instances, but there must be some relation to actual values, or else the method is not justified. If what is believed to be a temporary decline merges into a permanent decline, the basis of valuation will prove to be erroneous. Therefore, the method is somewhat dangerous and may be used only when it is boldly shown on the balance sheet so that no one is deceived. If the valuation is justified as of the time it was made, no blame attaches to those who fixed the values. If there was not sufficient justification for the valuation, those who used bad judgment must assume the responsibility. The usual reason given for not reducing inventories of basic materials to apparent lower market prices, is that large quantities cannot be purchased at less than cost of production. The reason fails if it is probable that large quantities can be purchased at the lower prices. When apparent market prices are not considered to be representative, the basis suggested in effect substitutes real market prices which are assumed to be reproduction or replacement costs.

SELLING PRICE BASIS.—Some conservatively managed and successful gold, silver, copper, lead mining companies, packing companies, crude and

refined oil producing companies, and sugar companies value the inventories upon the basis of **selling price less selling and delivery expenses and charges.** In many of these businesses the inventories are covered by **firm sales contracts.**

Good accounting practice permits inventories represented by firm orders from solvent and honorable payers, verified by actual experience (at least in the past) after the date of the balance sheet, to be priced at net sales prices when no one is deceived and when good business judgment sanctions the practice as exhibiting the true results of operations for a specified period, always assuming that the accounts are so stated that the exact facts are clear to all who use the balance sheets; that the practice is optional and that it is designed only to reflect "true financial conditions." When all of these conditions are observed the rule "cost or market, whichever is lower" has no relevancy.

The foregoing rule, however, is effective only when all parts of inventories not valued at sales prices are ruthlessly reduced to actual market prices if not worth cost, and when "market" is construed to mean the prices at which one would willingly buy equal quantities of exactly similar goods.

SELLING PRICE LESS MARK-UP BASIS.—It is a common practice in department stores and similar lines of trade to take inventories at the selling prices marked thereon and then reduce the value of the stock to its approximate cost by the deduction of the **average mark-up percentage.** In mercantile stores selling prices are based on actual cost plus a definite percentage of mark-up. This method is illustrated as follows:

Sales	$292,000
Closing inventory (selling valuation)	50,000
	$342,000
Less: Opening inventory (selling valuation)	37,000
Selling valuation of purchases	$305,000
Less: Purchases at cost	227,469
Mark-up (25.42% of $305,000)	$ 77,531
Closing inventory (selling valuation)	$ 50,000
Less: Mark-up (25.42% of $50,000)	12,710
Closing inventory (balance sheet value)	$ 37,290

The process may also be expressed in the form of a proportion, as follows:

305,000 Selling valuation of purchases	:	227,469 Purchases at cost	::	50,000 Closing inventory at selling valuation.	:	X Closing inventory at cost valuation.

$$X = \$37,290$$

The following description of the "gross profit test" appeared in the *Journal of Accountancy*, Mar. 1921.

"Stock on hand may be estimated at dates between the taking of physical inventories by applying the gross profit method. The rate of gross profit on sales since the last inventory may be estimated on the basis of the rate of gross profit earned on sales in prior periods. Any changes during the period in the cost or selling price of merchandise would have to be taken into consideration in estimating any probable variation between the rate earned in prior periods and the rate earned in the current period. The sales since the date of the last inventory would be multiplied by this estimated rate of gross profit to determine the estimated gross profit on the goods sold. Then the sales minus this estimated gross profit would be the estimated cost of goods sold since the last inventory.

The opening inventory plus the purchases, freight, and other additions to the cost of goods, minus the estimated cost of goods sold, would give the estimated inventory."

The **retail inventory system** is described as follows by T. L. Blanke, Director of the Bureau of Accounting and Control of the National Retail Dry Goods Association:

"The system enables the merchant to know what his stock of goods on hand is at the close of each day, week, month or year, or any other period, for each department in the store, and he thereby is able to control his investment. An efficient control of the stock not only saves money on the money invested, but, what is of much greater financial importance, helps in the avoidance of depreciation of goods on hand and in maintaining up-to-date merchandise.

"Under this system of inventory accounting, the merchandise is charged to the various departments on the books of account at the retail or selling price and also at cost. These cost and retail values are accumulated for the year by periods and the percentage of mark-up is arrived at by deducting the total cost from the total retail values and dividing the result by the accumulated retail figures. The retail value of the inventory at the close of any period is arrived at by deducting the sales and mark-downs taken on the original selling price from the accumulated retail values. The cost value of the goods on hand is then computed by subtracting from 100%, the percentage of purchase mark-up, the remainder being the percentage of cost. Multiplying the retail value of goods on hand by this latter percentage gives the value of the inventory at cost. **Physical inventories** are taken at the close of the year at the retail values and the book figures are adjusted to them.

"The **percentage of mark-up** on merchandise must be sufficient to cover the cost of salaries and other operating and administrative expenses, receiving and delivery costs, mark-downs, inventory losses of all kinds and a net profit for the business. That a net profit is not always realized is shown by the fact that the average net profit for all stores reporting in 1921 was less than one cent for each dollar's worth of sales.

"The system is very easily installed and operated, and it has been found entirely practical for the small as well as the large stores. It has been approved by the Treasury Department, through the Bureau of Internal Revenue, and is being installed by all the leading public accountants of the country. There is no question that the system actually saves the retailer many thousands of dollars annually. The president of one of the largest metropolitan stores recently said that it would increase his operating expenses fully $600,000 a year to go back to the 'cost' system of taking inventory, while a somewhat smaller merchant stated that the use of the 'cost' system would increase his expenses more than $200,000. It is therefore as important to the consumer that the retailer should be efficient in his accounting methods as it is to the retailer himself.

"What are the **advantages** of this system that enable the merchant to make this saving? In the first place, it furnishes a definite and reliable basis for the taking and valuing of stock for financial statement purposes. This is of vital importance to the banker and broker when passing upon the financial statement of a client. It is, therefore, of direct benefit to the retailer himself in that it establishes greater confidence in his financial ability, making borrowing easier and on more liberal terms.

"The inventory system is accurate in the results that it shows. The Internal Revenue Bureau has accepted it because of the fact that the book figures are accurate and easily verified. The complete records of every step from the

purchase of items to their final disposition by sale are readily checked. It is almost impossible to do this under the cost system. The natural result is that those who use the retail inventory method have substantiating evidence of their actions, while those without it may be subject to some adjustments by tax officials, which may be felt to be unjust, but, from lack of evidence, they will probably suffer.

"Furthermore, the fact that accurate inventory values are available at all times makes the system particularly valuable from an **insurance standpoint.** The records will show at any time just what the amount of stock is in each department, so that a store can carry sufficient insurance, but will not carry excess amounts, thus incurring unnecessary expense.

"In addition, this method provides **an efficient check** in dollars and cents as between book and physical inventories at retail, **without the use of percentages.** If large differences are found to exist between the two, the work can be rechecked and errors corrected. It will disclose inventory padding on the part of those handling the stock. If a buyer should report an inventory at retail higher than the book inventory, it would be sufficient grounds for believing that he was attempting to increase profits by inflating the stock. This is especially true where the buyer is receiving a bonus based upon earnings.

"Through its use **merchandise stocks may be controlled.** Unless the merchandise manager knows at least once a week the amount of stock in each department, the size of the inventory or the stock turnover cannot be controlled. Time is saved at the close of the fiscal period or at any time when the physical inventory is taken. With this system in operation, it is necessary to take the inventory at retail only, thus eliminating the chances of errors through the copying and decoding of cost marks. . . . Not the least of its advantages is that it provides for a complete monthly operating statement, making it possible to issue an accurate profit and loss statement for the business as a whole, as well as for each individual department. The figures affecting the gross profit being available at all times, unnecessary waste can be prevented through the elimination of losses that would not otherwise be discovered until the close of the year."

BASE STOCK BASIS.—Some manufacturers carry basic raw materials through the accounts at **fixed and perhaps arbitrary prices.** This plan has simplicity in its favor, but it is subject to criticism for the reason that balance sheets based on such valuations are misleading. Some concerns which adopted the plan at the beginning of the World War have concluded that their procedure was justified by the results. The Treasury Department refused to sanction the practice insofar as the computation of taxes was concerned.

INTERDEPARTMENTAL OR INTERCOMPANY PROFITS IN INVENTORIES.—These represent unrealized profit and **should be eliminated.** If transfer is made below cost, an interdepartmental loss occurs, but these arise only when departments are run on a commercial basis, the transfer being at market price. The loss is then taken care of automatically. For interdepartmental profits a reserve should be set up at inventory dates. If, in case of manufacturing concerns, it is not possible to identify products as they pass through the various processes, the profit must be estimated on basis of average margin of profit realized.

INVENTORIES OF RETURNABLE CONTAINERS.—Illustrations are cement sacks, barrels, cable reels, acid carboys, gasoline drums, cracker tins, petroleum drums, tierces, etc. Sometimes these are charged to customers in the invoice and a refund made when returned. Sometimes a separate invoice

is sent for them, credit being allowed upon their return. Sometimes merely a memorandum invoice is made out. Oil drums, cable reels, gasoline drums, and floating cooperage should be regarded as fixed assets, and an asset record kept therefor. Charge these at cost and write off depreciation in the usual way. If these are actually charged to customers, credit a reserve which will take care of refunds when they are returned. Periodical examination and adjustment of the account should be made.

Smaller items should be carried in container accounts. If a definite charge therefor is made against the customer, do not include the item in sales but credit the container account and charge this account when such retainers are returned.

PRICING OF INVENTORIES.—After the basis of the inventory valuation has been decided upon, the actual pricing of the inventory items should be done by the cost and general accounting departments. The pricing of an inventory of a manufacturing company has a few complications, particularly in connection with the exact prices to be used for work in process and finished stock. The principal problem involved here concerns the amount of overhead to be included in manufacturing costs.

OVERHEAD AND COSTS.—As stated previously, the portion of overhead expense which is applicable to the manufacturing of a product may be included in the costs used as a basis for inventory valuations. This general principle, however, requires some modification in cases where the actual overhead expenses are excessive, because of idle or part time conditions in some or all of the production departments. If costs include the actual burden rates, it must be ascertained that they represent fairly the **normal operating conditions.** In many industries normal operations are about 80% of the plant capacity. If **standard burden rates** are used, they should be scrutinized for the purpose of determining that they fairly reflect the normal or standard overhead expense during the period in which the products were produced and that they are not appreciably in excess of the overhead expense actually incurred. Where **departmental burden rates** are used, less difficulty is experienced in properly distributing the overhead charges. **General plant overhead rates** often distort valuations and costs when the stock included in the inventory is not evenly distributed throughout the productive departments.

SECTION 13

SECURITY MARKETS

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SECTION 13

SECURITY MARKETS

INVESTMENT MARKET DEFINED.—The investment market, from the standpoint of issuing companies, may be any place where their securities may be sold. Such places are generally found in the financial centers. The organized **stock exchanges** and **investment bankers** are in part instrumental in providing for issuing companies a market for their securities and where speculators and investors may buy and sell them.

The securities sold in the investment market consist of the **stocks, bonds,** and short-term notes of private corporations of all kinds, such as railroads, public utilities, industrial and commercial corporations, as well as obligations of nations, states, cities and other governmental bodies.

SALE OF SECURITY ISSUES TO INVESTMENT BANKERS.—When a corporation is in need of funds for a new plant or for equipment, or for other purposes, it may raise money by floating stocks, bonds or short-term notes. These securities may, under certain conditions, be sold directly to the public by the issuing company. If the issue is large, or if conditions are unfavorable, it might be some time before the needed funds could be raised in this manner. To overcome this situation and to assure a corporation of the immediate availability of funds for which it is floating the security issue, the custom of selling such issues to **investment bankers** has arisen. An **underwriter** is one who underwrites the sale of the issue; that is, one who guarantees the sale of the issue, generally to the stockholders, within a certain time, agreeing to take over any unsold portion at a certain specified price, and thus assuring the corporation of funds for immediate use. Frequently the investment banker buys the entire issue, and disposes of it to investors through his own sales organization. In other cases, the banking house will form a **syndicate** to underwrite and dispose of the securities.

There are investment banking houses in all cities of considerable size throughout the country. However, the **largest and most important** ones are located in New York, in or near the financial district.

The banking house **assumes all the risk and trouble** of selling the issue to investors or speculators. Its purpose is not to invest its funds in the securities of the corporation, but to distribute them at a profit to others.

PUBLIC OFFERING OF SECURITIES.—When a syndicate [1] has been formed and its **selling campaign** is ready, advertisements of the new issue are published in news and financial papers throughout the selling territory. At the same time the different members of the syndicate send out circulars to prospective customers, giving all the essentials of the issue, and the sale is begun. Prior to the date of the public sale the bankers make every effort to

[1] Particulars as to formation and operation of syndicates are included in the section on Capital Structure and Policies.

prepare their sales forces to dispose of the issue as quickly as possible, since by the nature of their business they must make a quick turnover on their capital.

The issue is sold at a **price** which may vary from 3 to 12% above that paid to the issuing corporation, in order to give the bankers a margin of profit. For example, the price paid to the corporation by the syndicate might be 90% of the principal amount of the issue, while it might be sold by the syndicate to the public at 95% of the principal amount. There is no set percentage of profit which the banker may take. It depends largely upon the rate of interest, the nature of the issue, the credit of the issuing company, and the condition of the investment market at the time.

TYPE OF BUYERS OF SECURITIES SOLD BY INVESTMENT BANKERS.—The type of buyers of securities offered by investment bankers is governed by the nature of the securities and the conditions of the investment market. In general, the purchasers of the offering are from the following classes:

1. **Investors,** who subscribe for the securities in order to hold them for the income they yield.
2. **Speculative investors,** who believe the principal and income are safe, but are primarily actuated by the hope of selling the securities later at an increased price.
3. **Speculators,** who plan to sell them at a profit as quickly as possible.

RISK TAKEN BY BANKERS IN HANDLING SECURITIES OF A PROMOTION.—The securities of a newly formed corporation are always of a speculative nature, no matter how good the prospects of the concern may appear. Hence an undertaking to dispose of a **promotional issue** involves generally a considerable risk. It means handling stocks or bonds whose value is doubtful and which it may not be able at the time to recommend unreservedly. Because of this increased risk and the necessity of building up the credit of the new corporation, bankers handling an issue of this type may often be required to carry it for a long period, in which case they may demand not only that the financial affairs of the new business be placed absolutely under their control, but also that their compensation must be in direct proportion to the risk they have assumed.

DISTRIBUTION THROUGH INVESTMENT HOUSES.—The large investment banking houses maintain offices in most of the important financial centers of this country and Europe, including New York, Chicago, Pittsburgh, Philadelphia, Boston, London and Paris. By means of these **branches** and through their other contacts they are in close communication with other bankers and dealers, who assist them in disposing of the security issues they have purchased.

Many of the large investment bankers handle all phases of financing of corporate security issues, from the preliminary investigation of the business to the distribution of the securities to the investors. To accomplish this they have a complete organization to exercise the functions of **investigation, analysis, purchasing and distribution.**

INVESTMENT BANKERS AS FINANCIAL ADVISERS TO CORPORATIONS.—Investment bankers make every effort to assist the corporation whose securities they are selling. They will advise as to what are the **best types of securities** to be issued for the particular requirements of the business, besides giving information concerning current conditions to be met with in the money market.

The advisory functions of investment bankers usually extend through the period the security issue they have distributed is outstanding. They generally serve the companies continuously in all financial operations pertaining to their capital issues. When additional securities must be issued for expansion or refunding operations, the bankers are in a position to recommend the type of security to be issued and the favorable period in which to bring it out.

SPECIALIZED INVESTMENT BANKERS.—In former days bond houses confined themselves largely to government, municipal and railroad issues, but with the development of large-scale corporate industry, the field of the investment bankers has been extended to include industrial and public utility securities. This evolution also developed specialized investment bankers. Some devote themselves almost exclusively to marketing municipal securities, others are concerned only with the financing of steam railroads, still others specialize in public utility issues or in industrial securities.

FUNCTION OF INVESTMENT BANKERS.—The **primary function** of investment bankers is to bring together the demand and supply of capital. Corporations in need of capital are put in touch with investors seeking investment. To consummate this purpose investment bankers perform **5 sub-functions** which are: (1) selective; (2) educative; (3) advisory; (4) protective; and (5) distributive.

Selective Function.—Of the many industrial corporations which desire to sell securities through investment bankers the latter will make their selection of the issues they will sponsor. In this they are guided by the soundness of the companies, character of the issue and their adaptability to the market, or the requirements of their clientele.

Educative.—The investment banker, by reason of his position as a middleman, is in a position to bring to the attention of the investing public the desirability of certain forms of investment in certain types of industry. On the other hand, he is in a position to encourage or discourage certain methods of financing of industrial corporations and instruct them in what is considered good business practice.

Advisory.—Investment bankers are in a position to advise investors in making purchases of securities to fit their needs or wishes. At the same time the investment banker often serves in an advisory capacity in financial matters of the company whose securities he is handling.

Protective.—Because they are usually very jealous of their reputation, investment bankers do not undertake to handle the securities of an industrial company until they have made a careful investigation of the merits of the issue.

Distributive.—The most important function from the standpoint of the banker himself is the distribution of the securities. To do this he must bring the securities to the attention of the investing public, advertise judiciously, make a market and sell the securities at a price he considers fair and at which they will be taken.

INVESTMENT BANKERS ASSOCIATION OF AMERICA.—Most investment bankers of any consequence are members of the "Investment Bankers Association of America." The requirements for membership are that a banking house must have a paid in capital of at least $50,000 and must be engaged in buying investment securities, either stocks or bonds, and offering them for sale as dealers to the public.

The members are grouped into **three classes** as follows:

1. **Wholesalers** who obtain the original issues and sell them to other investment dealers. They may or may not have their own retail facilities.
2. **Participating houses** which usually participate in syndicates formed by the wholesalers and usually do an extensive retail business. Participating houses occasionally bring out small issues on their own account.
3. **Retailers** who specialize in retailing in their own local market.

SALE OF SECURITIES THROUGH STOCK EXCHANGE.—Corporations having large issues of securities frequently make **application to have** them **listed** on the New York Stock Exchange, in order to secure for them the widest possible market. Before a stock or bond issue can be listed, however, a formal application must be made by the corporation, since the New York Stock Exchange never solicits new listings. Applications are referred to the **Committee on Stock List,** which is composed of 5 members of the Exchange. They consider such applications and make recommendations to the governing committee as to whether or not the securities should be listed.[2]

After securities have been listed on the Exchange, it may become necessary to arouse public interest in them. This may be done by bringing about a large number of transactions in the security. At the same time wide publicity is given to the affairs of the corporation. Not every new security which is listed on the Stock Exchange and immediately becomes active is in process of flotation through Stock Exchange manipulation. Often it is listed simply as an incident to its flotation, and is allowed practically to take its own course except for receiving some support from time to time in case its price tends to sag below the direct "over-the-counter" price.

The flotation of new securities through Stock Exchange operations has certain limitations which cannot be overlooked. In general, it may be said that new securities cannot be distributed to the public through the New York Stock Exchange, as one of its requirements for listing is that the security have already a reasonably wide distribution. Listing on the New York Stock Exchange is rarely feasible for the great mass of comparatively small corporations. Where the capitalization is under, say $1,000,000, it is likely to be difficult to have the stock listed on the New York Stock Exchange.

DISTRIBUTION OF SECURITIES IN FOREIGN COUNTRIES.—Sometimes it is planned to float a part of some of the larger security issues in a foreign country. This is more commonly the case with a **large bond issue of a railroad** than in other forms of securities. To make them more attractive to the foreign customer, they may be made payable as to principal and interest in the currency of the country where they are sold. The Pennsylvania Railroad Co., the New York Central and Hudson River Railroad Co., and others have issues that are payable in francs and sterling as well as in dollars.

Where bonds are payable in more than one country, the **rate of exchange** is usually **fixed** for the purpose of determining the exact amount the corporation will be obliged to pay. Where the bondholders will present their claims for interest or for principal at maturity will depend on the **fixed rate of exchange** stipulated in the bond and the position of the **current market rate of exchange.**

Dollar Loans.—A foreign loan which is made in the United States and is payable in U. S. gold coin, is designated as a **"dollar loan."** In such a case the American lender is not concerned with foreign exchange operations in connection with the payments of interest and principal.

[2] See Requirements for Listing Securities, p. 778.

Sterling Loans.—A foreign loan made in London, which is payable in the British monetary unit, is known as a "sterling loan." In such a loan the British lender is not concerned with foreign exchange.

The American lender or borrower on a "sterling loan" or the British lender or borrower on a "dollar loan," must, however, take into consideration the foreign exchange operations connected with the payment of the interest and the principal at maturity.

Making a Market for New Securities

SPECULATIVE INTEREST IN NEW SECURITIES.—In order that the banking house or syndicate managing the flotation of a new security issue may dispose of its securities, the public interest must be aroused. To create this interest **judicious publicity** is resorted to, including the distribution of circulars and letters to bring the new issues to the attention of the public. In addition to this direct advertising every effort is made to obtain favorable comments in the financial pages of newspapers.

The listing of securities on the Stock Exchange is sometimes a part of the flotation procedure. As **speculative buying** must be relied on in some cases to take the unsold portion of the new issues off the hands of the syndicate underwriting the flotation, the volume of transactions may be increased to bring the issue to the attention of the speculative public.

FLOATING SUPPLY IN THE MARKET.—From the time a syndicate offers an issue of securities until they are all finally taken out of the market for permanent investment, there is what is called the "floating supply" of the securities held by speculators. These speculators may include the **floor traders, specialists,** and **odd-lot dealers** of the stock exchange, and the **speculative customers of commission houses.**

There is almost always a greater or less floating supply of any large listed security in the hands of speculators, or investors who are anxious to buy or sell. When economic conditions are favorable and a given company is successful, the quotations for its securities rise and the tendency is for investors to buy them from speculative holders. The cumulative effect of purchases by investors is to decrease the floating supply in the market. On the other hand, if economic conditions are bad and the company encounters difficulties, the quotations fall and many investors sell out because they are unable or unwilling to take the risk of holding the securities. In this way the floating supply increases.

The **economic function** performed by speculators is to carry this floating supply of securities. The speculators assume the greatest risk and investors are enabled to find a market at all times for their securities. Carrying out this function involves risk for which speculators sometimes obtain large profits.

MAINTENANCE OF MARKET.—An important problem of the syndicate or the issuing house is to make a market for the new securities and maintain it until they have the entire issue disposed of. This is always an uncertain period. The bankers are under the necessity of stimulating activity in the new issue and maintaining the price at approximately the same level as at the date of issue. This they do by putting orders in the market to buy the new security **"on a scale down,"** or sell it **"on a scale up."** A given syndicate manager, for example, might give orders to buy 1,000 shares of a given newly listed stock at 99, 1,000 shares at 98, at 97, and 96 respectively; together with orders to sell 1,000 shares at 101, 1,000 at 102, at 103, and 104 respectively.

By such operations any investor who wishes either to buy or sell the new security can be certain of being able to do so. In due course orders away from the market are sent in by investors and speculators, just as in the case of long-listed securities, and accumulate in the dealers' and specialists' books. Gradually, but as rapidly as they can, the syndicate members reduce the amounts of their "scale orders" until at length, the dangerous initial stage having been passed, the new security is left to follow its own devices. This effort of the syndicate to provide an active market is not undertaken for the purpose of speculative profit; it tries to avoid heavy losses, but usually incurs small ones by the operation.

NEW ISSUES LEFT IN HANDS OF BANKERS.—Should the new issue of securities remain unsold at the expiration of the syndicate agreement, it becomes necessary for the syndicate members to carry them in proportion to their liability as set forth in the syndicate agreement. The length of time the securities must be carried depends upon the condition of the investment market, the terms upon which the securities were offered for sale, and their relative attractiveness.

Bankers do not carry securities indefinitely. If a favorable market for them does not develop within a reasonable time, they sell them at a convenient opportunity and take their loss.

"Churning" of Speculative Supply of Stocks.—The securities carried by speculators, which are a part of the floating supply, are seldom carried for long periods by the same speculators. There is **continuous buying and selling** from one speculator to another. In this "churning" a fairly active speculative stock may be held in turn by thousands of different speculators over a period of a number of years before the security is sufficiently seasoned to become attractive to investors, who may gradually take the greater part of the floating supply out of the market.

Investors and Speculators

Corporate securities are sold to investors and speculators. Although distinct types of securities appeal to each class there is no sharp line of demarcation between the different types.

INVESTORS.—In general, investors may be said to be those who are more concerned with assured **steady income** and **safety of principal** than with possible large returns at some risk of principal.

SPECULATORS.—Speculators consist of those who look for large returns and are willing to risk their principal to secure them. Speculators may be roughly divided into **three classes** as follows:

1. Purchasers of securities which afford **comparative safety of principal** but yield a larger return than can be obtained from strictly investment securities. This class of speculators purchase preferred stock, junior bonds, etc.
2. Those who purchase securities with a view to an **increase in principal** as well as a larger income return. They buy the common stocks of established companies which are not as yet seasoned investment securities.
3. Those who purchase securities, generally common stocks, with the sole expectation of securing an **increment of principal.** This class includes most of the so-called **margin traders** who buy and sell stocks on borrowed capital.

INCREASE IN NUMBER OF INVESTORS.—The number of investors in corporate securities is growing from year to year and at the same time the number of shares held per person is decreasing. This indicates that the general public is taking a greater interest in the ownership of capital stock issues of corporations.

A typical example may be cited by considering the ownership of the capital stock of the American Telephone & Telegraph Co. In 1912 the company had a little over 50,000 stockholders, with an average of 66 shares to each shareholder. In 1925 the company had about 345,000 stockholders, with an average holding of 26.19 shares.

The following statistical tables show the constantly widening public distribution of the common stock of three large American corporations—a public utility, an industrial, and a railroad—as of the earliest period in the years indicated:

Year	American Telephone & Telegraph Co.		U. S. Steel		Pennsylvania Railroad	
	No. of Shareholders	Aver. No. of Shares Held	No. of Shareholders	Aver. No. of Shares Held	No. of Shareholders	Aver. No. of Shares Held
1910..	35,823	72	22,033	230.70	65,283	126.41
1914..	55,983	62	47,221	107.64	91,571	109.04
1917..	70,555	56	42,564	119.42	100,138	99.82
1920..	120,460	37	104,376	48.69	133,068	75.04
1925..	345,466	26	174,831	43.96	146,400	68.19

TYPES OF SPECULATIVE TRADERS.—The four types of **speculative traders** who deal in securities on the Stock Exchange are:

1. Floor traders or scalpers.
2. Brokers and others in close touch with the market.
3. Persons dealing on basis of intrinsic knowledge of particular securities.
4. The general public, or the "lambs."

"Floor Traders" or "Scalpers."—Traders on the floor of the Stock Exchange who buy or sell for a profit of ⅛% to ¼% or more on a **quick turnover** are generally known as **"scalpers."** Many of these traders close out their transactions before the close of business each day. Their basis of operation is an intuitive feeling of the probable trend from the nature of trading on the exchange. Their action is largely governed by the nature of the operations of other brokers. When there is a large demand for a certain stock on the floor and the trend is upward, they help along the movement by making a purchase and in turn stabilize the price by selling at a slightly higher price. Scalpers are often in and out of stocks several times a day.

Brokers and Others in Close Touch with the Market.—Another class of speculators are brokers and others who are in close touch with the market and who carry on their buying or selling campaigns for the short swings of the stock market. In this group are found the **professional speculators** who sometimes operate on a large scale and form **"pools"** for the purpose of operating in a particular security. These "pools" work on the theory that sooner or later the general public will be attracted to the movement of the particular stock in which the pools are interested and will buy the stock. Generally, the public

buys the stock after it has had a considerable advance. By gradually selling out their securities, buying in when necessary to maintain the market, they may be able to clear a large profit for themselves.

Persons Dealing on Basis of Intrinsic Values.—Another class of speculators are those who buy or sell securities on the basis of their real or fancied knowledge of the intrinsic value of the securities. When the market price of a particular stock is a considerable distance away from what they consider the normal price, they buy or sell with the expectation that the normal price will be reached at a later date and they will be able to realize a profit.

General Public or the "Lambs."—The general public in stock market speculation, often designated as "lambs," make the sorriest spectacle of all speculators. This group of speculators are poorly equipped by training and experience to undertake stock market speculations. They do not possess dependable knowledge of market conditions, familiarity with the details of intrinsic as well as market values of securities, and have as a rule but limited financial resources. Their operations are generally little more than a gamble.

INSTITUTIONAL INVESTORS.—

Savings Banks.—Savings banks purchase large amounts of bonds. The laws of most of the states carefully restrict savings banks to the purchase of certain types of high-grade bonds. In Wall Street these are known as **savings bank bonds.** The New York law regarding savings banks has been copied by several other states. In some states, mainly in the South and West, there is no legislation at all governing the type of securities savings banks may invest in.

Commercial Banks.—The investments of commercial banks in stocks of industrial and commercial corporations are negligible as it is considered bad banking practice to own shares of such companies for investment purposes. The permanent investments of commercial banks are largely confined to high-grade bonds. National banks are ordinarily not permitted to hold stocks unless obtained on defaulted loans, in which case they must be disposed of at the earliest opportunity.

The following table from the Report of the Comptroller of the Currency shows the amount and character of bonds and stock investments of national banks as of June 30, 1923, and June 30, 1924:

(In thousands of dollars)

	June 30, 1923	June 30, 1924
Domestic securities:		
State, county, or other municipal bonds	$ 401,816	$ 505,528
Railroad bonds	503,348	573,571
Other public-service corporation bonds	337,293	397,560
All other bonds	521,200	575,743
Claims, warrants, judgments, etc.	90,252	90,594
Collateral trust and other corporation notes	135,235	105,933
Foreign government bonds	153,723	179,470
Other foreign bonds and securities	91,236	85,055
Stock, Federal reserve banks	71,862	72,318
Stocks, all other	69,892	74,778
Total	$2,375,857	$2,660,550
United States Government securities	2,693,846	2,481,778
Total securities of all classes	$5,069,703	$5,142,328

Insurance Companies.—Insurance companies make **large purchases of high-grade bonds.** In this way insurance companies play an important part in providing funds for the productive needs of a community.

Investment Associations.—Investment associations **or trusts** are popular in Great Britain, France and Holland, where they buy large quantities of stocks and bonds. They sell their own bonds and shares and invest the proceeds in securities of corporations. The purpose is to substitute, for the uninformed judgment of the individual with a small amount to invest, the judgment of men experienced in investments, with larger funds in the aggregate, and to secure a wider distribution of the risk. The American investment public is beginning to take an interest in investment trusts. The indications are that their use will extend in the next few years.

Miscellaneous Institutions.—Such institutions as universities, philanthropic and eleemosynary institutions, must confine themselves to strictly investment securities. The same is true of estates which are administered in trust, unless the creators of the trusts expressly relieve the trustees of responsibility and direct them to purchase or hold non-legal securities.

Stock Exchanges

DEFINITION.—Stock exchanges, in a broad sense, are meeting places for buyers and sellers of securities. In a more restricted and accurate sense, stock exchanges are **unincorporated membership associations,** the members of which trade in securities for themselves and for others.

GROWTH OF THE STOCK EXCHANGE.—Fundamentally, a stock exchange is like any other market, and the operations that are carried on are mainly the basic operations of buying and selling securities. Exchanges like the New York Stock Exchange, however, are so thoroughly organized and perfected that they are able to handle a very large turnover of sales. By means of a very elaborate system of telegraph and telephone communication, as well as numerous other mechanical devices and systems, the business of the Exchange is made world-wide in its scope. American investors can, at any time, purchase the better known securities or turn securities which they own into cash almost immediately through the medium of the Stock Exchange. This is due not alone to the efficiency of the New York Stock Exchange as a unit but to the widespread organization of brokerage houses, which are in constant communication with members of the Exchange by telephone and telegraph.

PRINCIPAL STOCK EXCHANGES OF THE WORLD.—The principal stock exchanges of the world are:

The London Stock Exchange is an international market of enormous scope. A great number of foreign securities are listed on this exchange.

The Paris Bourse is the leading exchange of France. This exchange deals mainly in French securities, although a large number of foreign issues are also traded in.

Other international exchanges are located at Amsterdam, Berlin, Vienna, Rome, Madrid and Tokio.

The New York Stock Exchange is the largest exchange in the United States. Although American securities are mainly traded in on this exchange, the list of foreign securities is growing rapidly. A rather detailed description of this exchange is given on pages 762 to 780.

The Consolidated Stock Exchange of New York is often referred to as the **"Little Board,"** to differentiate it from the New York Stock Exchange which is

generally referred to as "The Exchange" or the **"Big Board."** The securities listed on the Consolidated Stock Exchange are mostly those listed on the New York Stock Exchange. The only practical difference between the two exchanges is in size, volume of trading, and units of trading. On the "Little Board" stocks are ordinarily bought and sold in 10-share lots or multiples of 10, whereas on the "Big Board" most of the dealings are in 100-share lots or multiples of 100.

THE NEW YORK CURB MARKET.—The New York Curb Market was formerly an unorganized and unhoused market for the purchase and sale of securities not otherwise dealt in. All transactions were of an informal nature and no official record was kept of them. In 1911 the New York Curb Market Association was formed, the first step toward organizing the Curb Market. In 1921 a building was opened for use of the New York Curb Market Association, which is now an organized market, patterned, in general, after the New York Stock Exchange.

Type of Securities Traded In.—Securities of companies which are unable or unwilling to meet the listing requirements of the New York Stock Exchange are frequently traded in on the Curb Market. The Curb Market is a popular market for new issues.

The securities traded in on the Curb Market are not, however, all of a speculative nature nor are they all unseasoned. Many issues are traded which are of a very high order, for instance, certain of the Standard Oil securities, as well as securities including both stocks and bonds of numerous substantial corporations, many of which could be listed at any time, upon proper application, on the New York Stock Exchange.

Units of Trade.—Transactions on the Curb Market may be in **odd lots,** that is, units of less than 100 shares.

OTHER AMERICAN STOCK EXCHANGES.—Besides the leading exchanges in New York, there are other exchanges in the principal cities of the United States. The tendency is to establish a stock exchange wherever investors and corporate enterprises exist. The small exchanges generally confine their operations to **local securities.** There are stock exchanges in Philadelphia, Baltimore, Pittsburgh, Cleveland, Cincinnati, Chicago, St. Louis, San Francisco, New Orleans, Denver, Boston, and other cities. These exchanges are comparatively small and confine their operations largely to securities in local companies.

JURISDICTION, CONTROL AND OPERATION.—Courts take judicial notice of stock exchanges. It has been judicially declared that:

"The stock exchange is so much a part of the financial method of our time that we take judicial notice of its general nature. We know that in a particular sense it is an association of stock brokers and stock dealers contributing to a general fund on account of their membership, and having the exclusive right to buy and sell on the floor of their exchange. They give aid to their patrons by the closest scrutiny of securities presented to be listed by them for sale. The information so obtained is always available, and prices are fixed by their transactions. It is evident from the nature of the case that these stock exchanges are the best and most favorable agencies for the sale of their listed securities, and that the calling of the list, with all that it implies, suggests the fullest information available. While the exchanges have what is sometimes called the unlisted department, and permit the sale of securities which do not meet the requirements of the stock list, even these are supervised by their com-

mittees, so that the greatest measure of security consistent with the freedom of legitimate trade attends their operations."[3]

New York Stock Exchange

IMPORTANCE AND OBJECT.—The most important American stock exchange is the New York Stock Exchange, located at Broad and Wall Streets, New York City. It far overshadows in importance all other exchanges in the United States. The **objects** of the New York Stock Exchange, as stated in its constitution, are "to furnish exchange rooms and other facilities for the convenient transaction of their business by its members, as brokers; to maintain high standards of commercial honor and integrity among its members; and to promote and inculcate just and equitable principles of trade and business."

ORGANIZATION AND MEMBERSHIP.—The New York Stock Exchange is an unincorporated membership association. The total membership is limited to 1,100 and a full membership is maintained. A membership is generally termed a **"seat"** on the New York Stock Exchange. A seat is obtained either by purchase from a deceased or retiring member, or by bidding high enough to induce some member to sell. The price of a seat varies with the demand. In July of 1925 a seat was sold for $122,000.

An **applicant** for membership in the Exchange must be 21 years of age, a citizen of the United States and acceptable as to character to the membership committee.

The **initiation fee** is $4,000, payable on the day of the applicant's election. The Exchange is supported by **dues,** not to exceed $1,000 a year, payable quarterly.

CONTROL AND OPERATION OF THE EXCHANGE.—The Exchange is governed by a **Constitution and Rules** corresponding to by-laws. According to the constitution, the legislative and judicial powers of the Exchange are placed, without qualification, in the hands of the **Governing Committee,** composed of the president and the treasurer of the Exchange and 40 members.

The **officers of the Exchange** are the members of the Governing Committee, the secretary, the first assistant secretary and the accountant. The president, treasurer and 10 members of the Governing Committee are elected annually by the members of the Exchange. Any member in good standing is entitled to vote.

The **real powers** of the New York Stock Exchange are vested with the Governing Committee. Its power over individual members is absolute, as conferred upon it by the provisions of the constitution. It has the power to suspend or expel any member for violations of the constitution, or for unjust or inequitable conduct in connection with trading, or for other acts which may be detrimental to the interests of the Exchange. A **high standard of conduct** is enforced and members may be disciplined for offenses which violate the rules of the Exchange but are not violations of any state or federal law, and would not on that account be cause for action in a law court.

The jurisdiction of the Governing Committee does not extend beyond those affairs of the members which pertain to trading on the Exchange. It is limited to matters arising between the members of the Exchange in the course of their business with each other as brokers, and with the public as buyers or sellers of securities.

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[3] *Dibert* v. *D'Arcy,* 248 Mo. 644.

IMPORTANT COMMITTEES.—The more important of the committees of the New York Stock Exchange, in addition to the Governing Committee, are the following:

Conference Committee, which consists of the president, vice-president, treasurer and the chairmen of several other committees, and whose duties are to hear reports from the various committees and others, advise with them and make recommendations to the governing committee.

Committee on admissions, which considers applications for membership in the Exchange.

Committee on business conduct, which considers matters concerned with the business relations of the members and customers. It keeps in touch with the prevailing prices of securities as listed on the Exchange in order to guard against any improper transactions resorted to by members.

Committee on stock list, which considers applications for the listing of securities upon the Exchange This committee reports to the governing committee, giving statements with full details of the organization, capitalization, resources, indebtedness, and other information required of the applying corporation, and making recommendations as to whether or not the stock should be listed on the Exchange. The committee may remove from the list any security when the amount of stock outstanding becomes so small as to make free and open trading in it impossible or inadvisable.

RULES OF THE STOCK EXCHANGE.—All transactions entered into by members with one another and with customers are governed by **well defined rules.** The constitution and rules of the New York Stock Exchange are strictly enforced to safeguard the interest of the public in dealings with the members of the Exchange, and to regulate the conduct of its members and hold them to the highest standards of fair dealing and honesty.

Contracts made on the floor of the Exchange are inviolate and must stand unless both parties agree to alter their terms. All serious disputes are brought to the attention of the arbitration committee which passes on the merits of the controversy. However, in the case of **corners** the Governing Committee may postpone the time of deliveries on contracts, and in case the parties to any contract in a cornered stock fail to agree on "a fair settlement price," such price may be fixed by the committee, after a hearing before it or a special committee appointed for that purpose.

BROKERS AND TRADERS.—The members of the New York Stock Exchange may be classified in general as brokers and traders, although many members may act in both capacities.

Brokers execute orders of their customers to buy or sell securities on the floor of the Exchange. Their compensation is the commission they may charge for their service, and is regulated by the Stock Exchange.

Traders, usually referred to as "floor traders," buy and sell securities on the floor of the Stock Exchange for their own account and attempt to make a profit thereby.

The broker acts as **agent** for someone else in buying or selling securities, working on a **fixed commission.** The dealer or trader, however, works entirely for himself and not as agent for any customer. He buys and sells stock entirely on his own account and his profit is made, not out of commissions, but out of sales of securities at prices higher than those which he pays. When a broker executes an order for another member, he does so for a smaller commission than the fixed commission for executing orders for a non-member.

The operations of a stock broker are usually broader in scope than those of

brokers in other lines of business. This is especially true in the case of **margin business.** In such cases the broker buys and sells the stock in his own name. He retains possession of the margined stock and the name of the customer or principal does not generally appear in the transaction.

THE "TWO-DOLLAR" BROKERS.—The "two-dollar" broker is a broker whose customers are other brokers. His chief work is to assist commission houses and other brokers in executing their orders in heavy markets, when the work is too great for the regular commission broker to handle it all on the floor. The name—"two-dollar" broker—arises from the fact that his fee for purchasing or selling 100 shares of stock was formerly $2.

The commission now charged by "two-dollar" brokers for every 100 shares bought or sold for other brokers is as follows:

$1.25 where the price of stock is below $10 a share.
$2.50 where the price of stock is $10 a share or above but under $125 a share.
$3.00 where the price of stock is over $125 a share.

SPECIALISTS.—The specialist is a broker who specializes **as a dealer** in a particular security or securities, which are located at a single post on the floor of the Stock Exchange. Commission brokers often give over their orders to some specialist to execute on the same basis as their dealings with the "two-dollar" broker.

ODD-LOT DEALERS.—Trading on the New York Stock Exchange is done in units of 100 shares. In order to accommodate persons desiring to trade in less than 100 shares, the system of **trading in odd-lots** has grown up. Odd-lot dealers will purchase from 1 to 99 shares of stock and later sell them on the Exchange in 100 share lots, or they will purchase 100 share lots on the floor of the Exchange and split them up to accommodate customers who wish to buy from 1 to 99 shares.

OPENING A BROKERAGE ACCOUNT.—Under the rules of the Stock Exchange no employee of a bank, stock exchange house, trust or insurance company is permitted to open a speculative account unless the written consent of the employer is obtained. Aside from these reservations, the Exchange is open to all persons on equal footing for trading. Opening an account with a brokerage firm is much like opening a bank account. The prospective customer is required to fill out a certain form giving his name, address and occupation, as a matter of record and identification. Some brokerage houses require prospective customers to sign an agreement that they will maintain with the broker sufficient margin on their accounts and that in the event of their failure to advance additional margin upon request, the broker is authorized to sell the security.

DUTIES OF THE BROKER.—Generally the relationship between the broker and his customer is that of agent and principal. The broker must, therefore, exercise reasonable skill, diligence and good faith in carrying out the customer's orders. In the case of purchases on margin, the relationship between customer and broker is that of pledgor and pledgee. In these transactions, the broker undertakes:

1. To advance the purchase money required in excess of the margin.
2. To obtain the stock promptly as ordered.
3. To hold such stock as the property of the customer and at the customer's risk, ready for delivery upon his order.
4. To deliver stock to the customer on payment of the balance due on his account. This balance will include not only the balance of the pur-

chase price but also commissions, interest, bank exchange and any other expenses incident to the handling of the account. Any dividends paid on the stock are credited to the customer when paid by the company whose stock he holds.

5. To notify the customer of his intention to close the latter's account, unless the margin is increased when necessary.
6. To sell the shares upon order of the customer and to remit to him the proceeds thereof. A broker may not make secret profits for himself out of transactions for the customer, and must notify his customer of all the transactions made for him.
7. To render an accounting whenever a statement is demanded. Monthly statements of accounts are usual.

DUTIES OF THE CUSTOMER.—The customer has certain obligations which he must carry out, as follows:

1. He must keep his accounts **amply** margined.
2. He must repay the broker for all outlays and losses incurred for his account.
3. He must pay the usual commission to the broker as soon as his order is filled.

DURATION OF RELATION OF BROKER AND CUSTOMER.—The **legal relation** of broker and customer is one of **agency,** the broker being the agent and the customer the principal. The agency relationship continues until the purposes of the relationship have been completed. It is terminated in one of the following ways:

1. Sale of securities held for benefit of the customer.
2. Purchase of securities when the purchase is made against a previous "short" sale.
3. Transfer of the account and securities held for the customer or for his benefit by a third party upon payment of the balance due.
4. In margin transactions the agency relationship is coupled with an interest, and is irrevocable until the full indebtedness on the account is paid.

KINDS OF ORDERS.—The following are different kinds of orders which may be presented by a customer to his broker for execution on the New York Stock Exchange:

At the Market.—On an order for the purchase or sale of securities to be executed at the market, the broker buys or sells the customer's stock immediately, regardless of the price he is compelled to pay or accept. The broker, in the interests of his customer, must carry out the order at the **best possible bid or offer** on the market.

At a Definite Price.—When an order is entered at a **specified or limited price,** and the transaction is a sale, the customer sets a definite price, below which the broker may not sell the securities. He must sell either at the specified price or a higher one. If the transaction is the purchase of stock, the customer sets a certain price which he is willing to pay. The broker is empowered to buy either at this price or at a cheaper price. The customer may set a **time limit** within which the broker may execute the order, or he may make it good until cancelled, commonly referred to as a **"G.T.C." order.**

Unless otherwise specifically stated, all orders, except stop-loss orders, are good only upon the day for which they are entered. At the close of business on that date they automatically expire.

Stop-Loss Order.—This form of order is used when the customer desires to limit the amount of his possible losses. If after the purchase of stock on margin the tendency of the market is downward, the customer may enter with his broker a stop-loss order. This order names a certain price below the current market price at which the broker is to sell when the market reaches that price. If a customer is **selling short** (see page 774) he may also limit his losses by a stop-loss order. Such an order names a price above the current market price. If the security rises to that figure, the broker buys. For instance, if the customer has sold short 100 shares of U. S. Steel at 115 and desires to limit his losses in the event of a rising market, he enters an order with his broker to buy at 120. As soon as the security sells at 120, the broker must buy the shares as promptly as possible.

Under the rules of the New York Stock Exchange, a **stop-loss order to buy** becomes a market order when the stock sells at or above the stop price. **A stop-loss order to sell** becomes a market order when the stock sells at or below the stop-price.

KINDS OF PRICES.—The prices quoted for securities may vary considerably according to the nature of the transaction and some of the surrounding circumstances. Some of the different bases on which prices are quoted in stock exchange transactions are briefly described:

Bid price is the price a would-be purchaser offers for a security.

Asked price is the price asked for a security by a seller in transactions leading up to a sale.

Actual price in a transaction is the price at which a transaction actually takes place.

Market price is the price at which a security is selling at a given time in its usual market place, and if there are no transactions at the moment, it is generally given by stating the bid and asked prices.

Nominal price is an approximation of the probable value of certain securities, quoted as a basis for negotiation where actual transactions or firm bids and offerings are lacking.

Spot price is the price quoted on securities or commodities for immediate delivery. The term is generally found in quotations in the commodity markets and is unusual in stock market transactions.

Firm price is a price quoted and adhered to for a definite period. This method of price quoting is frequently used between brokers in dealing in inactive stocks. A broker, having a prospective order to buy a given stock "if the price is right," makes inquiries of other brokers, and if he can, gets them to quote a "firm price" on the security. The first broker then reports the "firm price" to his customer and if the price is satisfactory the order for its purchase is given.

Exhaust price is an expression sometimes used in margin transactions and means the price level at which the holder's margin will be exhausted. For instance, if a man buys U. S. Steel Common at say 100 on a 20 point margin, the exhaust price would be 80. As a matter of fact stock bought on margin will seldom be held by a broker until the "exhaust" price is reached. A practice which is considered better and is gaining in usage is that the margin be "kept good," that is, for every point of margin "consumed" by a decline in the market value of the stock, an equivalent amount of additional margin must be deposited.

KINDS OF DELIVERY.—Orders may also be classified according to the type of delivery, which may be one of the following:

For Cash.—When the sale is for cash the stock must be delivered by the seller) the buyer upon the same day the sale is made.

Regular Way.—Delivery of stock is made upon the business day following he day of the contract. Saturday is not considered a delivery day. This is he usual method of trading.

At Three Days.—Delivery of stock is on the third day following the day of ontract.

Buyer's or Seller's Option.—Such an option is for not less than 4 days or more han 60 days from the day of contract.

MARGIN TRADING.—**"Buying on margin"** is the phrase used in buying tocks or bonds, which to a large extent corresponds in other commercial trans-ctions to **purchasing on credit.** In buying on margin the purchaser advances nly a percentage, or margin, of the total amount of money required. Most of he necessary funds for the transaction are supplied by the broker, either out f his capital or by borrowing, generally of banks.

In the ordinary purchase and sale of stock on margin the customer is required o deposit with his broker at least a certain **minimum margin** which depends on he market character of the stock and the price. If the market price declines fter the purchase, the customer may be called upon for additional margin in rder to comply with the margin requirements of the broker. If the customer ells short and the price of his stock advances, he may also be called upon for dditional margin. In either case, if additional margin is not furnished and he customer's equity decreases to the point where the broker is in danger of uffering a loss, the account may be closed out by purchase or sale as the case nay be.

MARGIN PURCHASE ILLUSTRATED.—The procedure in buying on mar-in is as follows:

The speculator desires to buy 100 shares of a stock which is selling at $100. 'he margin required will depend on the stock and the brokers, and may ap-roximate $10 a share. The speculator, therefore, gives his broker $1,000 and n order to buy 100 shares. The broker, or his representative on the Stock Exchange, buys the 100 shares on the floor. The broker must pay for these hares at the end of the next day if the transaction is executed in the "regular ay"; that is, he must be prepared to pay the price of $100 per share, or 10,000. In order to raise this money, he borrows from a bank, depositing he shares of stock as collateral for the loan. On high-grade stock the bank ill loan him up to about 80% of the market value, or about $8,000. The emaining $1,000 necessary must be supplied by the broker out of his own funds. the market for the stock should later advance, say, 10 points, the customer ay give an order to sell. The stock will then bring $11,000. Out of this mount the broker returns the $8,000 to the bank and $1,000 to himself, and hen deducts from the balance his brokerage charges, interest on the $9,000 e advanced the client, and other incidentals, if any. The remainder is turned ver to the customer. If the stock should go down 4 or 5 points, the broker ill call upon the customer for additional margin, that is, to advance more oney. If the customer fails to do so, the broker will sell the stock at the arket price, repay the bank and himself, deduct his brokerage charge and terest, and then return to the customer what is left of the original $1,000 eposit.

A trustee, in the absence of express authority, is not permitted to trade on argin with trust funds. The direction of a trust "to invest" does not include

trading on margin. A broker knowingly receiving trust funds for margin transactions, is accountable to the beneficiary for those funds.

GENERAL MARGIN REQUIREMENTS.—The marginal requirements of stock brokers vary, but, in general, stock brokerage concerns having membership on the New York Stock Exchange carry securities listed on that exchange in lots of 10 to 100 shares and upwards when conservatively margined. The amount required is sometimes set as follows:

Shares selling under			$ 10	must be paid in full.						
"	"	from	10 to $ 20	....	50%					
"	"	"	20 "	60	10	points	(dollars	per	share)	
"	"	"	60 "	90	15	"	"	"	"	
"	"	"	90 "	110	20	"	"	"	"	
"	"	"	110 "	150	25	"	"	"	"	

In other cases the broker may set a fixed percentage, say 20%, of the purchase price.

Much depends on the character of the stock, but in each case the amount of margin required is for the protection of the broker as well as the customer. In buying on margin a purchaser should not assume liabilities which he could not pay in full in case of necessity.

COMMISSIONS.—Brokers operating on exchanges charge standard commissions for buying and selling. On the **New York Stock Exchange** the charges on stock transactions are as follows:

							Per 100 Shares
Stocks selling below			$ 10	.....			$ 7.50
"	"	at	10 and under	$ 25	.....		12.50
"	"	"	25 "	"	50	.....	15.00
"	"	"	50 "	"	75	.....	17.50
"	"	"	75 "	"	100	.....	20.00
"	"	"	100 "	"	200	.....	25.00

On stocks selling at $200 per share and over, 25 cents per share for the first $200 in price and 5 cents per share additional for each $50 increase in price, or fraction thereof. The minimum commission on an individual transaction in stock is not less than $1.

New York Curb Market commissions for stocks are as follows:

							Per 100 Shares
Stocks selling under $			.50, 2% of amount involved				
"	"	at	.50 and under	$ 1	.....		$ 2.00
"	"	"	1.00 "	"	3	.....	4.00
"	"	"	3.00 "	"	5	.....	5.50
"	"	"	5.00 "	"	10	.....	7.50
"	"	"	10.00 "	"	125	.....	15.00
"	"	"	125.00 "	over	.....		20.00
Minimum commission on individual trades					.....		1.00

TRANSFER TAXES.—

Federal Tax.—The federal law imposes a stamp tax of 5 cents on the original issue of each **$100 of par value,** or fraction thereof, of stock, and 2 cents on each transfer thereafter. **Stock without par value** is taxed at 5 cents a share on original issue and 2 cents a share on transfers. This transfer tax must be reckoned with by a customer as one of the fees which are paid for him by the broker.

State Tax.—In Massachusetts, New York, and Pennsylvania, a state stamp tax is also imposed upon the sale, agreements to sell, memoranda of sale, or transfer of all stock. The amount of this tax is 2 cents for each $100 of face

value, or fraction thereof. Stock without par value is taxed at 2 cents on each share.

The tax is payable whether the transfer of stock is made on the books of the company, by assignment in blank, or by delivery, or by any paper transferring the beneficial or legal title or merely the possession of the stock or certificate. Agreements evidencing the deposit of securities as collateral for loans are exempt. Mere loans of stock are not taxable.

The transferor or seller must affix and cancel the required stamps and pay the tax.

ORDERS EXECUTED MUST BE CONFIRMED.—The laws of New York state and the rules of the New York Stock Exchange require all brokers to

BROWN & CO.
400 WALL ST.

New York, October 5 19

Mr Blank

We have this day **BOUGHT** for your account and risk, in accordance with the rules of the New York Stock Exchange.

NO. SHARES	DESCRIPTION	PRICE	TIME	FIRM NAME
200	Southern Pacific	90	1.03	Jacobson & Co.

It is agreed between broker and customer:
1. That all transactions are subject to the rules and customs of the New York Stock Exchange and its Clearing House.
2. That all securities carried from time to time in the customer's marginal account, or deposited to protect the same, may be loaned by the broker, or may be pledged by him, either separately or together with other securities, either for the sum due thereon or for a greater sum, all without further notice to the customer.

Respectfully yours,
BROWN & CO.
By William Jones

FIG. 1. Broker's Confirmation

Showing purchase for the account of Mr. Blank by Brown & Co. of 200 Southern Pacific at 90 from Jacobson & Co. at 1:03 P. M.

render customers a confirmation of every order executed for them. The **confirmation** (Fig. 1) sets forth the name of the broker, the name of the customer, the name and number of shares bought or sold, the price, date, and time of transaction, and the name of the firm from whom they were bought or to whom they were sold. This memorandum is sent out on the day the transaction is consummated, and enables a customer to verify the transaction.

MONTHLY STATEMENTS OF CUSTOMERS' ACCOUNTS.—Stock brokers render statements to their customers of their accounts, usually each month. A **typical customer's statement** (Fig. 2) with explanations is taken from "The Work of the Stock Exchange," by J. Edward Meeker, economist of the New York Stock Exchange. It is rendered to Mr. Blank by his brokers, Jenkins & Co. It contains columns for the dates of the customer's various transactions and for the amounts of the securities bought or sold. Other columns contain a description of the item, the price at which it was bought or sold, the debit or credit thus incurred by the customer, and his debit or credit balance. At the extreme right of the statement the interest items are calculated upon a detachable slip in the manner shortly to be described. Such statements are made out with two carbon copies, and the originals usually record credit cash items in red. The original is kept as an office record, while one of the duplicates goes to the customer and the other is available for transmission to the branch office or correspondent in case the customer's order came in to the commission house from either of these sources. The statement is **expressed in terms of cash** rather than securities. The customer is credited with long stocks and with the cash extension of stock sold, and debited with short stocks and the cash extension of stocks purchased.

SUMMARY OF TRANSACTIONS.—In the typical account of Mr. Blank under consideration, the customer in the beginning deposited as **margin** a $1,000 Baltimore and Ohio Railroad 6% bond, 10 shares of U. S. Steel preferred, and his check for $2,000. He then bought 200 Southern Pacific at 90 and one day later sold it at 92. He next proceeded to sell 100 Reading short at 75, but some time afterwards covered the sale of 75½—an unprofitable transaction. He also purchased 100 Columbia Gas and Electric at 60, 100 Chesapeake and Ohio at 40, and 100 Mexican Petroleum at 150, and **sold short** 100 U. S. Steel common at 88½, and 100 Crucible at 110. The latter short sale he later covered at 100.

At the outset Blank's securities deposited as margin are entered as "Received," and he is credited with his check for $2,000. His first transaction was his purchase of 200 Southern Pacific at 90, which occurred on August 4. The date of this item on the statement, however, is August 5, for items are dated, not according to the dates when contracts for the purchase and sale of securities were made on the floor of the Exchange but when such contracts were settled by delivering the securities. If Blank's order was executed on a Monday, the contract would ordinarily be settled Tuesday, etc., according to the daily settlement system employed on the Stock Exchange. So it is, too, with all the other purchases and sales entered on the statement—they are posted on the day when the contract is settled.

HOW THE BROKERAGE COMMISSION IS ENTERED.—For this purchase of 200 Southern Pacific at 90, Blank is debited for $18,030. The extra $30 represents the commission charged by Jenkins & Co. for making the purchase for him, and is added into the extension instead of being posted as a separate item. Since the customer's purchase of stock creates a debit cash extension, commissions are in this way added to it. On the other hand, since

DR JOHN BLANK,
13 FOREST STREET,
N. Y. C

IN ACCOUNT WITH JENKINS & CO., 500 WALL STREET, NEW YORK

DATE	BOUGHT or Received	V	SOLD or Delivered	DESCRIPTION	PRICE	DEBIT	CREDIT	BALANCE	DATE	INTEREST ADJUSTMENT	INTEREST DAYS	INTEREST DEBIT	INTEREST CREDIT
AUG													
4	1M			BALT OHIO 6S 1929 J&J	RECVD								
	10			U S STEEL PFD	RECVD								
				CHECK			2000 00	CR 2000 00	4	2 000 CR	1		33
5	200			SOU PAC	90	18030 00		16030 00	5	16 030	1	2 67	
6			200	SOU PAC	92		18362 00	CR 2332 00	6	2 332 CR	3		1 17
9			100	READING	75		7483 00	CR 9815 00	9	2 332 CR	1		39
10	100			COL GAS & ELECT	60	6015 00		CR 3800 00	10	3 683	2	1 23	
12				DIVD 100 READING		100 00		CR 3700 00	12	3 783	4	2 52	
16				DIVD 100 COL GAS ELECT			150 00	CR 3850 00	16	3 633	2	1 21	
18	100			READING	75 1/2	7565 00		3715 00	18	3 715	2	1 24	
20			100	U S STEEL	88 1/2		8831 00						
	100			CHES OHIO	40	4015 00		CR 1101 00	20	7.730	5	6 44	
25	100			MEX PETE	150	15020 00				22 750	5	11 37	
			100	CRUCIBLE	110		10981 00	2938 00	25				
28	100			CRUCIBLE	100	10015 00							
				PREM 100 CRU 3DAYS 1/4		75 00		13028 00	28	21 859	3	10 93	
31				INT 6 C C 1 1/2		47 01						37 61	1 89
				INT 3%			95	13074 06	31			9 40	94
												47 01	95
AUG													
31				BALANCE		13074 06							
	1M			BALT OHIO 6S 1929 J&J									
	10			U S STEEL PFD									
	100			COL GAS ELECT									
	100			CHES OHIO									
	100			MEX PETE									
			100	U S STEEL									

FIG. 2. A Form of Customer's Statement Used by Many Stock Exchange Houses

the customer's sale of stock creates a credit cash item, the commissions on sales are subtracted from the cash extension. Thus, when Blank sells his 200 Southern Pacific at 92, he is credited with $18,400 less commissions of $30 and taxes of $8, or with $18,362. The commission computations here are based on rates obtaining prior to November, 1924.

TAXES ON SALES.—The taxing of sales of securities also affects the customer's statement. On the sales of stock of no par value or of $100 par, there is a federal and a state tax of $2 each per 100 shares, or $4 for both. When Blank sold his 200 Southern Pacific, taxes amounting to $8 were therefore deducted from his credit extension, along with commissions. Since this tax applies only to the sale and not to the purchase of stocks, he was not taxed when he bought the stock. Southern Pacific stock has a par value of $100, while Reading has a $50 par. Accordingly, when Blank on August 9 sold 100 Reading his tax amounted to $2 instead of the $4 he had to pay for selling 100 U. S. Steel (another $100 stock) on August 20.

DIVIDENDS AND PREMIUMS.—The statement in Fig. 2 gives illustrations of the payment of dividends to the customer on his long stock, and of the payment of dividends by him on his short stock. When the dividend on Reading is paid, Blank is already short 100 shares of this stock, and accordingly he is debited $100 for the quarterly $1 per share. But when the $1.50 per share quarterly dividend on Columbia Gas and Electric is declared, Blank is long of 100 shares, and consequently he is credited with $150.

Blank is charged for a premium for three days of ¼ on the 100 shares of Crucible Steel of which he is short. As the **floating supply** of the stock was scanty and it was difficult to borrow it, Blank had to pay a premium to get the desired stock. On August 25 he sold 100 shares short at 110 and did not cover the sale until the 28th, when he purchased the same number of shares. In the interim, Jenkins & Co. had to borrow the 100 Crucible for him and, owing to its temporary scarcity, had to pay a daily premium of ¼%, or $25, for it, for three days. Accordingly, Blank is debited for $75.

COMPUTATION OF INTEREST.—The interest charges are calculated upon the detachable slip on the right of the statement. The column headed "Interest Adjustment" contains the cash amounts upon which the customer is due to receive or pay interest. To save time, all interest charges or credits are first calculated at 6%, and the total credits and debits are then adjusted to the correct and actual rate, which may be either more or less than the flat 6% rate first employed.

Blank's account has a **credit balance** of $2,000 (the amount of his check) for one day. Accordingly, he is credited with 33 cents interest upon it. By his purchase of 200 Southern Pacific at a total cost of $18,030, he creates a **debit balance** of $16,030 which remains one day until he sells this stock. He is therefore charged interest upon $16,030 for the one day, and thus receives a debit of $2.67. This interest charge serves to repay his brokers the interest and commissions they may have had to pay on their loans.

At the end of the month a total debit and credit interest item is obtained. As shown in the statement, Blank is debited with $37.61 and credited with $1.89. These figures, as has been stated, were arrived at on the basis of a 6% rate. But the brokerage house will rarely if ever pay as much as that on customers' temporary credit balances. In this case Jenkins & Co. pay 3%, and, comparatively speaking, this rate is high. If the customer's credit interest item at 6% was $1.89, at this actual 3% rate it would amount to 95 cents. Accordingly, Blank is credited with this sum at the bottom of his credit column.

THE RATE OF INTEREST CHARGED.—The exact rate of interest at which Blank is charged is derived by averaging the rate paid by the house on all of its various loans during that month. If this average rate of interest amounts to 7%, the firm adds, say, ½, to compensate it for its trouble, expense, and risk in making these loans for its customers and accordingly charges the latter 7½%. This means that in addition to the 6%, a **carrying charge** of 1½% must be made. Therefore, the $37.61 (or interest at 6%) is increased by 25%, giving $47.01 as the interest at 7½%. This sum is then entered as a debit on the customer's statement. A special rule in the constitution of the Exchange forbids its member firms from competing unfairly with each other for business by charging "special and unusual rates of interest." Such a practice is looked upon by the Exchange as tantamount to a breach of its commission law.

After these interest items are figured in, Blank is shown to have a total debit balance at the end of the month of $13,074.06. In addition, his account shows that he is long of the securities which he originally left with Jenkins & Co. as margin—namely, his $1,000 Baltimore and Ohio 6% bond and his 10 shares of U. S. Steel preferred, as well as the 100 Columbia Gas and Electric, the 100 Chesapeake and Ohio, and the 100 Mexican Petroleum which he bought on margin during the month. At the same time he is still short of 100 U. S. Steel common.

DETERMINING THE CUSTOMER'S MARGIN.—What Blank is principally interested in is what his **equity in the account,** or the sum of money belonging to him in it, amounts to. This can be determined only by first imagining that his account has been completely closed—that is, that all his long stocks have been sold and all his short stocks bought in. Suppose this is done on August 31, when Baltimore and Ohio 6's are selling at 91, U. S. Steel preferred at 107, Columbia Gas and Electric at 62, Chesapeake and Ohio at 44, Mexican Petroleum at 148, and U. S. Steel common at 85. At these prices Blank's 320 shares of long stock possess a market value of $27,380, and his 100 shares of short stock a market value of $8,500. In addition, we learn from his statement that his debit balance owed to his broker amounts to $13,074.06.

Had Blank's account contained only long stock, his equity in it could be determined simply by subtracting his debit balance (which he owes his broker) from the total market value of his long stock (which is credited to the customer). On the other hand, had the account consisted entirely of short stock, Blank's equity would be determined by subtracting from his credit balance (in such a case he would necessarily have a credit rather than a debit balance), the total market value of his short stock.

In the somewhat more complicated instance above cited the customer's account contains both long and short stock. The simplest way to reckon the customer's equity in such an account is to consider the account long or short according to the preponderance of its commitments, and figure in the lesser of the two afterwards. In this case Blank is long 320 shares and short 100 shares. His account is thus mainly a long account. In reckoning Blank's equity, therefore, his debit balance of $13,074.06 would be subtracted from the total market value of his long stocks, or $27,380, which would give us $14,305.94 But there is another subtraction still to be made—namely, the $8,500 which he must pay to cover his short stock at its market price. When this is subtracted, Blank's true equity of $5,805.94 is obtained.

This figure represents the value of his Baltimore and Ohio 6% bond ($910) and his 10 shares of U. S. Steel preferred ($1,070), or $1,980 altogether, which

he originally put up as margin. It also contains the $2,000 originally deposited with the broker for the same purpose. When these two items are subtracted from Blank's total equity in the account, his profit from his transactions is found to amount to $1,825.94.

SHORT SELLING.—"Short sale" is the term used in stock exchange transactions to designate a sale of securities which are not possessed or owned by the seller. In a short sale the **seller borrows the security** to effect delivery. He will return the stock when he **has covered,** that is, bought it in. His motive in selling short is to make a profit from a decline in the price of the stock during the interval between his short sale and his covering operation.

A short seller is in virtually the same position as the farmer who sells his crop before it is planted or harvested, or publishers of newspapers or magazines who accept subscriptions for the future daily, weekly, or monthly delivery of their periodicals. In such cases, the sellers sell what they do not possess but which they feel confident they can obtain and deliver when the delivery dates arrive.

OPERATION OF A TYPICAL SHORT SALE ON MARGIN.—A person wishing to sell a stock short deposits, say, $1,000 with his broker and instructs him to sell 100 shares of that stock. The broker sells the securities on the floor of the Exchange. Under the rules of the Exchange delivery must be made the next day, but as neither the broker nor the speculator owns the stock sold, it is necessary to borrow the stock in order to make delivery. This is usually done through the **"loan crowd."** Stocks are loaned on payment of the market price which is to be returned with the agreed interest, if any, on the return of the securities. This borrowed stock is used by the broker to make the delivery on his sale.

ECONOMIC EFFECT OF SHORT SALES.—The general economic effect of short sales is that they act as **stabilizers of security prices.** Undue inflation of prices is just as detrimental as undue depression. Short selling acts as a check on the upward rise of prices of securities; and when prices of stocks fall, the purchase of securities previously sold tends to support a declining market. Short selling has thus a tendency to prevent extremes of fluctuations in security prices.

If the market declines and the seller orders his broker to buy in the stock at a lower price, the broker makes the purchase and uses the stock he obtains to return the loan with which the original delivery was made. The difference between the price at which the stock was sold and the purchase price less the brokerage charges and taxes, represents the profit to the seller on the operation.

In a short sale, the seller does not usually have interest charges accruing against him, because the broker, when he borrows the stock, advances the market price; instead, he may actually receive interest on the money advanced, though it is customary for brokers not to credit customers with such interest.

If the market rises to a point where the amount of margin on deposit makes it hazardous for the broker to carry the account, he calls on the customer for more margin. Failing to get a response, he will buy in the stock, return the stock borrowed, and charge the customer with the brokerage. The difference between the selling price and purchase price plus commissions and taxes represents the seller's loss.

A speculator who buys stock with the expectation that it will rise and enable him to sell at a profit, is a **"bull."** A speculator who sells short, expecting that the price will fall so that he can cover his sales at a lower price than that at which he has sold, is a **"bear."**

PRIVILEGES IN STOCKS.—Privileges in stocks are known as **"puts," "calls"** and **"spreads."** Trading in privileges is European in origin and subsequently was adopted by brokers and traders in the United States. Members of the New York Stock Exchange are forbidden to trade in privileges on the floor of the Exchange.

A **"put"** is a privilege issued for an agreed consideration whereby the holder may deliver a given number of shares of a given stock to the maker, at a certain price within a certain time. If the privilege is not exercised before its expiration date, it becomes valueless.

All dividends go with the stock. In case the stock covered by the privilege should sell **"ex-dividend"** the amount of the dividend would be deducted from the original price on the privilege and that would then be the price at which the privilege would become operative.

A "put" in effect is similar to a short sale of stock within the time limit specified in the privilege. It is sometimes bought where the purchaser is long of the stock and wishes to limit his possible loss to the price stated in the "put."

A **"call"** is a privilege whereby the buyer for an agreed price receives the right to demand the delivery of a certain number of shares of a given stock from the maker, within the prescribed time limit at the price stated in the privilege. It is sometimes bought where the purchaser is short of the stock and wishes to limit his possible loss to the price stated in the "call."

A profit in a "put" accrues only when the price of the stock falls below the "putting" price. Likewise a profit in a "call" accrues only when the market price exceeds the "call" price. Privileges must be exercised before their expiration to be of value. They automatically cease when the time limit expires.

ADVANTAGES OF TRADING IN PUTS AND CALLS.—There are certain decided advantages in trading in puts and calls:

1. **Limitation of Loss.**—The purchase of a "put" or "call" limits the possibility of loss to the amount paid for the privilege.

2. **Possibility of Gain.**—There are only two limitations to the possibilities of gain. These are (a) the limit of time in the privilege and (b) the market price of the security after the purchase of the privilege. Where the market price of the stock justifies the sale of a stock against a "call," or the purchase of a stock against a "put," a person may sometimes obtain a large profit without running the risk attending margin transactions.

THE BOND MARKET.—There is a special bond market on the New York Stock Exchange. The **unit of trading** in bonds is $1,000. Two $500 bonds is considered a good delivery for $1,000, but a delivery of $1,000 in bonds in smaller denominations than $500 is not a good delivery. Sales of bonds of smaller denominations than $500 are readily made on the Exchange, but the dealer demands a slight **premium** in buying or selling them. In the case of Liberty bonds which may be readily exchanged at federal reserve banks for bonds of $1,000 denomination, the premium demanded is very slight, amounting to only about 1/10%, or less. However, with bonds which dealers may find difficult to change to larger denominations, the premium charge, either in buying or selling, is considerably larger than this.

HOW BONDS ARE QUOTED.—Bond prices are **quoted in percentages** of their face value. Thus a $1,000 bond, quoted at 97½, would sell at $975; a $100 bond quoted at 103 would sell at $103.

Except in the case of bonds in default, and income and adjustment bonds, where uncertainty in the matter of interest prevails, **interest accrued** up to the day of delivery is added to the selling price of the bonds. Interest is cal-

culated, not to the day on which the sale is made, but to the day upon which the seller delivers the bonds to the buyer. Calculation is made from the date of the last interest payment.

To take a **concrete example**—a $1,000 5% bond, purchased at 99 on April 10, its semi-annual interest payment dates being January 1 and July 1, would cost the purchaser $990 in principal and $13.75 accrued interest (3 months and 9 days interest, the interval between January 1 and April 10—the day of delivery being excluded), a total of $1,003.75. On July 1 the holder would collect the semi-annual interest coupon for $25, this representing the $13.75 which he advanced at the time of purchase, and the $11.25 interest accruing since that time.

When the buyer purchases a bond in default, or an income or an adjustment bond, it may be sold to him **"flat,"** which means without any interest added to the market price. A $1,000 bond in this case sold at, say, 80 will bring $800.

In figuring bond yields, in addition to the coupon rate of the bond (5%, 6%, or whatever it may be), there must be taken into consideration the difference between the price paid for the bond and the figure which it will be worth at maturity (ordinarily 100). A bond selling at a discount (less than 100) would, of course, return the investor a higher yield than its coupon rate and one selling at a premium (above 100), less than its coupon rate.

The foregoing may be made clearer by a specific example. Take a 5% bond, maturing in 5 years and bought at 95. The investor pays for his bond $950 and accrued interest. He receives, however, 5% interest on the face value of the bond ($1,000) or $50 interest—in other words, whereas he has actually invested only $950, he receives interest on $1,000. Dividing the annual return, $50, by the original investment, $950, we arrive at approximately a 5.25% yield.

Five years hence, however, this bond will be worth $1,000, or $50 more than the investor paid for it. Dividing this amount by the 5 years that the bond has to run, it means that each year the bond increases $10 in value, or 1% of its face value, which, added to the 5.25% yield, above figured, results in an annual return of about 6.25%.

If, in the above case, the investor had paid a premium for his bond instead of purchasing it at a discount, it would be necessary for him to regard a portion of his income as the return of part of his principal and thus amortize, as it is called, between the time of purchase and the maturity of the bond, the premium paid.

These methods of figuring are not exact, the slight inaccuracies being accounted for by the fact that no consideration has been given to interest on interest, but they will suffice to show the principles involved in arriving at bond yields.

SALE OF COUPON OR REGISTERED BONDS.—Unless otherwise expressly stipulated, at the time of the sale, brokers and dealers always presume that the dealing is in coupon bonds, not registered bonds. If an investor wishes to buy or sell a registered bond, it must be so stated at the time of transaction, otherwise the transaction would be presumed to be in coupon bonds.

ALL ORDERS FOR BONDS AUTOMATICALLY CANCELLED ONCE A MONTH.—According to the custom of bond brokers all bids and offers on bonds are automatically cancelled on the last Saturday of each month. This

means that all orders, including "G. T.C." orders, must be renewed by the customer if he wishes them to remain in force for another month.

THE STOCK AND BOND TICKER.—All transactions in stocks on the New York Stock Exchange are given full and immediate publicity by means of the stock ticker, while bond transactions are recorded on the bond ticker. As soon as a sale has been made on the floor of the Stock Exchange, information is telegraphed to the New York Quotation Co. which has ticker machines installed throughout the lower part of Manhattan Island. The Western Union Telegraph Co. immediately copies the quotation from these tickers and transmits it on its own tickers which are located all over the United States.

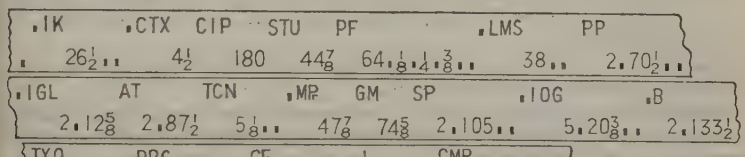
.IK .CTX CIP STU PF .LMS PP
. 26½.. 4½ 180 44⅞ 64.⅛.¼.⅜.. 38.. 2.70½..
.IGL AT TCN .MR GM SP .IOG .B
2.12⅝ 2.87½ 5⅛.. 47⅞ 74⅝ 2.105.. 5.20⅜.. 2.133½
TXO .PRG .CF J .CMR
48⅜.. 48½.. 2.44⅞.⅞ 3.46⅛ 9⅛.2.9..

FIG. 3. Specimen Sections of Ticker Tape

Specimen sections of stock ticker tape recording sales on paper tape ⅝ in. wide are shown in Fig. 3. Abbreviations represent sales as follows:

Top row: 100 shares of International Nickel at 26½; 100 of Consolidated Textile at 4½; 100 of Cast Iron Pipe at 180; 100 of Studebaker Corporation at 44⅞; 100 of Pacific Oil at 64; 100 at 64⅛; 100 at 64¼; 100 at 64⅜; 100 of Ludlum Steel at 38; 200 of Pan-American Petroleum at 70½.

Second row: 200 shares of International Agricultural Chemical at 125⅝; 200 of American Tobacco at 87½; 100 of Trans-Continental Oil at 5⅛; 100 of International Mercantile preferred at 47⅞; 100 of General Motors at 74⅝; 200 of Southern Pacific at 105; 500 of Independent Oil and Gas at 20⅜; 200 of Baldwin Locomotive at 133½.

Bottom row: 200 shares of International Mercantile Preferred at 47⅞; 100 of Texas Co. at 48⅜; 100 of Philadelphia & Reading Coal & Iron 48½; 200 of Colorado Fuel and Iron at 44⅞; 100 at 44⅞; 300 of Central R. R. of New Jersey at 46⅛; 100 of Continental Motors Corporation at 9⅜; 200 at 9.

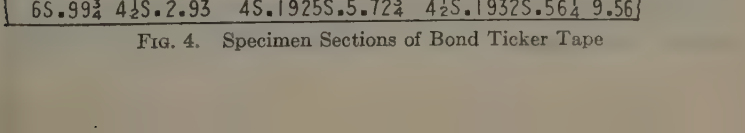
ST SY SC .MRS SIP
4S.1925S.5.72⅝ 6½S.20.115¼ 6S.115¼. 4½S.80¾ 5S.2.84¼
SC SX.DD WL.WHEELING TY.GM
7S.94⅞ 7S.107 100¾ 5S.98½
UG R ST ST
6S.99¾ 4½S.2.93 4S.1925S.5.72¾ 4½S.1932S.56¼ 9.56

FIG. 4. Specimen Sections of Bond Ticker Tape

Specimen sections of bond ticker tape recording sales on paper tape $\frac{5}{8}$ in. wide, are shown in Fig. 4. Abbreviations represent sales as follows:

Top row: $5,000 of Chicago, Milwaukee & St. Paul Ry. 1925 4's at 72$\frac{5}{8}$; $20,000 of Skelly Oil 6$\frac{1}{2}$'s at 115$\frac{1}{4}$; $1,000 of Sinclair Con. Oil 6's at 115$\frac{1}{4}$; $1,000 of Morris & Co. 4$\frac{1}{2}$'s at 80$\frac{3}{4}$; $2,000 of Sinclair Pipe Line 5's at 84$\frac{1}{4}$.

Middle row: $1,000 of Sinclair Con. Oil 7's at 94$\frac{7}{8}$; $1,000 of Steel & Tube Co.'s 7's at 107; $1,000 of Wheeling & Lake Erie Ry. at 100$\frac{3}{4}$; $1,000 of Toledo & Ohio Central Ry. 5's at 98$\frac{1}{2}$.

Bottom row: $1,000 of United Fuel Gas Co. 6's at 99$\frac{3}{4}$; $2,000 of Reading Co. 4$\frac{1}{2}$'s at 93; $5,000 of Chicago, Milwaukee & St. Paul Ry. 1925 4's at 72$\frac{3}{4}$; $1,000 of Chicago, Milwaukee & St. Paul Ry. 1932 4$\frac{1}{2}$'s at 56$\frac{1}{4}$; $9,000 at 56.

Complete lists of the abbreviations in use are published from time to time by the New York Stock Exchange.

CORNERS.—A stock is said to be **"cornered"** when most of the floating or purchasable stock of the company falls into the hands of a single individual or group of individuals, who may then advance the price at will. In such situation, all those who are short of the stock, that is, those who have made contracts to sell, and are, therefore, under the necessity of purchasing it, are at the mercy of those who have cornered the stock and must cover their sales at whatever price is demanded.

When a stock is partially cornered, the price rises and the premium on borrowed stock increases. This combination has a tendency to prevent an excessive short interest. Where, however, these economic factors do not accomplish their purpose and a corner develops, there is no longer a free and open market for trade. As this situation is detrimental to the interest of the Stock Exchange, trading may be suspended as a protection to the brokers and the public.

LISTING SECURITIES.—A **"listed security"** is one which has been admitted to the right of being traded in on the Stock Exchange. Before a stock or a bond can be listed, certain requirements of the Stock Exchange must be complied with.

The **advantages** to be gained by listing securities on the Stock Exchange are:

1. **Wide Market.**—Listing securities gives them a wide market whereby an issue can be distributed to a large number of stockholders, and provides better marketability.

2. **Bona Fide Issues.**—The securities listed on the Stock Exchange are bona fide issues of existing companies. The investigation made by the Stock Exchange covers a wide range as to the financial and operating condition, legality of the issue, and other matters connected with the company, which assures the public that the securities listed are at least bona fide. Further than this the Stock Exchange cannot go. The subsequent value of the securities is determined by financial and business conditions over which the Stock Exchange has no control.

3. **Publicity.**—The listing requirement that stockholders must receive an annual financial and operating report from the company gives the stockholders of such companies the means of keeping informed as to the condition of the concern.

REQUIREMENTS FOR LISTING.—A corporation which desires to have its securities listed must make formal application to the New York Stock Exchange. The committee on stock list passes on all applications. The **list-**

ing fee is $100 for each $1,000,000 or part thereof of each class of securities to be listed. For stock having no par value, $100 for each 10,000 shares must be paid.

A great deal of information is required of the corporation by the stock list committee. The corporation is given three sets of documents which must be filled out: A list of requirements which must be met; a questionnaire; and a distribution statement. Some of the more important requirements are as follows:

1. **Complete information** of the general nature of the corporation as set forth in the corporation charter.
2. The **latest available balance sheet and profit and loss statement** together with a complete financial history of the corporation.
3. A **statement of the purpose** of the issue to be listed.
4. Copies of the **corporation charter** and by-laws, and certain legal papers certifying to the legality of the issue to be listed.

The New York Stock Exchange is constantly revising its listing requirements and will supply upon application up-to-date instructions for the information of corporations contemplating the listing of securities.

ACTION ON APPLICATION FOR LISTING.—When the necessary information and documents are received by the secretary of the Stock Exchange, they are carefully examined and then turned over to the committee on stock list and a date set for a hearing. The application is also posted on the floor of the Exchange for the information of the members, who may acquaint the committee with any information they may have concerning the corporation. If the committee on stock list finds that the application is satisfactory, they will recommend to the governing committee that the application be granted. The final authority for placing the security on the list rests with the governing committee which generally, but not always, accepts the recommendation of the committee on stock list. After the governing committee grants authority for the listing of a new security, notice of such action is sent through the tickers, and trading may begin in the security the next morning on the floor of the Exchange.

All information which is received by the committee on stock list concerning the financial condition or organization of a corporation is always available to the public. The committee reserves the right to give full publicity to all such information, not only for the benefit of the members of the Exchange but as a protection for the public in general.

RIGHT TO REMOVE STOCK FROM THE LIST.—The governing committee reserves the right to **suspend dealings** in the securities of any corporation or to remove such securities from the list, whether because the outstanding amount has become so small as to make inadvisable or impossible further dealings therein, or for other reasons held by the committee to be sufficient cause of removal.

H. K. Pomroy, ex-president of the Stock Exchange, has stated the conditions which may necessitate the removing of stock from the list in his testimony in the "Money Trust Investigation," Volume I, page 49, as follows:

"Our experience of many years as governors of the Exchange, and the experience of previous governing committees, is that a small amount of stock in the list leads to a condition that is dangerous to ourselves and to our customers, the public; and therefore, in order to obviate the danger, when in our opinion that condition has been reached, we remove the stock from the list or suspend it from dealings. . . . The danger may arise from two causes. A

small quantity of stock is more easily subject to manipulation than a large quantity, and by means of manipulation people may be induced to buy stock at very much greater prices than it is worth. The other danger, which of course is the greatest one we fear, is the subject of a corner in the stock, which not only hurts the broker and his customer, but demoralizes the whole country, the Northern Pacific corner being a case in point."

Stock Market Loans

TIME LOANS.—When a broker gets actual possession of the securities, he may deposit them with a bank as collateral for one of two kinds of loans, **time loans** or **call loans.** The time loan is made for a definite period of time, such as 60 days, 3, 6 or 9 months, or a year. The rate of interest is fixed when the loan is made and does not vary during the life of the loan. Banks will generally lend amounts up to about **80% of the market value of the collateral,** the exact amount varying with the type of the security and the conditions of the money and security market. If the value of the collateral declines, the broker must supply additional collateral to the bank up to the agreed amount of the margin.

CALL LOANS.—A call loan is one having no specified time to run. Either the broker or the bank may terminate it at any time. Call loans are **renewed each day.** The rates of interest may vary from day to day, depending upon fluctuations in the money market.

There is a special **money desk** on the floor of the Stock Exchange at which call loans may be negotiated. Such loans may also be negotiated through **money brokers** or through direct negotiations between borrowers and lenders. When negotiated on the Stock Exchange the different money lenders announce the amounts of money which they have to lend, and the rates. The borrowing brokers file the amounts of loans which they expect to negotiate. In this way the supply and demand for call loans is easily ascertained.

From the factors mentioned in the last paragraph the money rates for call loans may be estimated. This estimated rate is known as the **renewal rate** and is established by the Exchange, merely as an expression of opinion and is not binding in any way upon borrowers and lenders. This renewal rate, however, is generally a very accurate estimate of the rates that should result from the prevailing supply and demand, and is generally adopted by borrowers and lenders in making new loans or in renewing old ones.

RENEWAL OF CALL LOANS.—Call loans are made for one day only and they must be renewed each day by borrowers if they wish them to continue. Renewals are made each morning between 10 A. M. and 12:15 P. M. The borrower does not send a formal notice of renewal of his loan if he wishes it to continue at the same rate of interest. However, if he believes the rate to be high, or if the exchange renewal rate has been changed from the previous day's rate, he will notify the lender either of his desire to pay off his loan or to continue it at the new rate that he is willing to pay. The lender in the same way may notify the borrower either to pay off his loan at once or to continue it at a new rate of interest satisfactory to the lender.

In a communication to the U. S. Senate, dated March 27, 1920, from the governor of the Federal Reserve Board, it was stated:

"The operation of the law of supply and demand is equally effective in determining the rate for commercial loans and all other borrowings. In fact, rates for commercial loans and rates for collateral call loans have a common

root in the law of supply and demand, and the conditions which affect one in the main affect the other, although not in like degree, as is demonstrated by the far wider fluctuation of call rates and the higher points to which they go. The rates of call money do not determine and have not exerted an important influence on the rates for commercial borrowings."

It often happens that an upward or downward movement of all money rates will first be seen in the call money rate. This is natural, for the fact that call money represents excess or surplus funds only, makes the call loan market the most sensitive to the fundamental factors of supply and demand underlying all money markets. In reality, therefore, the call loan rate often serves as a barometer for other money rates, but it does not cause later disturbances in these markets by its own fluctuations. In the long run all money rates tend to move in unison, and like water to seek their own level. When there is a general shortage of money, all money rates are high. When there is a plethora of funds, all money rates are low.

SURPLUS FUNDS OF INTERIOR BANKS LOANED IN THE STOCK MARKET.—Loans made on securities other than U. S. government bonds cannot, like commercial loans, be rediscounted by member banks at the federal reserve banks. For this and other reasons, the average banker in the regular course of his business prefers to make commercial loans rather than either time or call loans based upon security collateral. The result of this is that only the **excess funds of bankers,** accumulated for special purposes, or the reserves of non-members of the Federal Reserve System, which cannot be safely and profitably placed in commercial loans or other investments, are available for call loans.[4]

Such excess funds of banks all over the nation, and even beyond our borders, are collected in New York to loan in the stock market. The larger banks in such local financial centers as Chicago, Philadelphia, Boston, Cleveland, Detroit, St. Louis, Richmond, Baltimore, San Francisco, or Montreal carry accounts of the smaller banks of the immediate vicinity and constantly absorb their surplus funds at a low rate of interest. But these larger banks in turn carry accounts with the still larger banking institutions in New York, to which they transmit the surplus funds they have gathered in their immediate vicinity to be employed in stock market loans and other investments. The result is that a large part of the excess funds of the nation's banks, instead of being allowed to remain idle, is mobilized in New York banks and profitably placed in loans on security collateral. The advantage of this system to the country banker is that a market is provided for him in which he can invest funds at any time and to any extent he wishes, and from which he can withdraw his funds with equal speed.

DIVERSIFICATION OF LOANS.—In order to diversify the risk of loans, banks prefer to loan their funds to several different brokerage firms rather than all to one firm. On the other hand, brokers prefer to borrow from several different banks in order to diversify the risk of having all their loans called at the same time.

Bankers in making loans have a preference for **"mixed" collateral securities.** Such collateral generally consists of railroad and industrial securities in about equal proportions. Loans on railroad securities alone have become rare, but loans on all industrial securities have become quite common. Sometimes such collateral is more desirable than mixed collateral.

[4] The Work of the Stock Exchange, J. Edward Meeker, pp. 177, 178.

OTHER FACTORS IN COLLATERAL LOANS.—Money lenders have a number of requirements regarding the nature of collateral acceptable for loaning purposes which are generally understood and complied with by borrowers.

High Priced Stock.—Bankers prefer collateral with a ready market and which does not fluctuate violently. Extremely high-priced stocks with wide fluctuations are not considered the most desirable collateral for loaning purposes.

Odd Lots.—Bankers dislike to have in their loan envelopes odd lots of securities, that is, from 1 to 99 shares of any stock, because they are more difficult to keep track of, and involve a more complicated method of marketing, if this should be necessary.

Unlisted Stock.—Generally, unlisted securities are not acceptable for loans. When they are accepted, a wider margin is required and often a higher rate of interest is demanded than with listed stock.

Relation of Stock Market to Various Interests

RELATION TO CONSUMERS.—Consumers are benefited indirectly by organized stock exchanges in that the latter are partly instrumental in reducing the cost of living. This is done by making possible quantity production and distribution by large industrial, transportation and trading corporations, which can be created only by large accumulations of capital. Such accumulation of capital could hardly be possible were it not for the machinery provided by the exchanges, which provide a means by which the savings of the population can be united.

RELATION TO PRODUCERS.—The creation and operation of large industries necessitates stock corporations with thousands of stockholders. The progress and growth of industries depend upon distribution of their stocks and bonds, first to speculators and then to investors.

The stock exchanges provide the facilities for selling the securities of large corporations to speculators and investors. In addition to enabling the companies to obtain capital for business uses, stock exchanges provide the means of distributing the risks of industry. Without such distribution many of the larger concerns could not be established.

RELATION TO INVESTORS.—To the **large investors** the stock exchanges constitute a part of the daily machinery of business life. They enable them to distribute their investments in any manner they may wish and shift their investments at any time to suit their needs, or to sell them in case of necessity.

The small investors can obtain the same service as large investors. For a small and fixed rate of commission they can buy or sell securities in an open market at prices which are publicly reported all over the country on the ticker and in the newspapers. The small investors can suit their needs from a great variety of stocks and bonds, ranging from the old and well seasoned investment securities to the newer flotations of a more speculative character.

Another advantage the small investors have is that they can obtain financial information concerning the companies whose securities they are thinking of purchasing. Such information is not always available in the case of unlisted securities.

The number of small investors is rapidly increasing and, in the aggregate, amounts to a considerable factor in financing corporate enterprises.

RELATION TO CORPORATIONS.—The stock exchanges provide the machinery by which the savings of individual speculators and investors all over

the country may flow into productive industry. Although this flow of money may not pass directly from the investor to the corporation, this result is eventually accomplished through the various stages the securities take from the time they are issued by the corporation to the time they are absorbed by investors.

RELATION TO BANKERS.—Almost all bankers are directly or indirectly investors or dealers in securities, and consequently in a measure depend on the operations of the stock exchanges. The nature of their particular type of banking determines their relation to these institutions. The savings banker is interested in securities as an investor; the commercial banker is chiefly interested in securities because they constitute collateral for loans; the investment banker is chiefly interested as a dealer and distributor of securities.

The large banks and trust companies in the financial centers come in direct contact with stock brokers through the large loans they make on securities dealt in on the stock exchanges.

RELATION TO FOREIGN TRANSACTIONS.—Securities listed on the stock exchanges of two nations, particularly international securities, afford an acceptable substitute for gold as a medium of foreign exchange transactions. The instant marketability of such securities makes them almost as acceptable as gold as a medium of exchange.

RELATION TO GOVERNMENTS.—Practically every great stock exchange of the world assists its government in maintaining its credit and the negotiability of its debt by providing a market place for its securities. In addition to listings of government securities of the United States, many foreign government securities are traded in on the New York Stock Exchange.

SECTION 14

"BLUE SKY" LAWS

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SECTION 14

"BLUE SKY" LAWS

NECESSITY OF COMPLIANCE WITH LAWS.—Any person, before selling or offering for sale securities in any state, should be carefully advised as to whether there is in that state a **Securities Act,** generally known as a **"Blue Sky" Law,** containing requirements which must first be met or which regulate the sale of securities. Most of the states in this country have now passed blue sky laws of some description.

These state laws differ in the various states. An offering may be legal for sale in one state and not in another. There are **widely different systems of qualifying** under these laws. Certain ones prescribe explicitly and in detail exact procedures to be taken before any offering or sale may be made. For example, some require the licensing of the party offering the securities and his agents, and furthermore, require a permit for the sale of the securities. These licenses and permits are issued by the **state securities commission** or other administering body after various papers and showings for that purpose have been filed with it. All of these papers and showings must be filed before the securities are offered for sale. Other states place no burden at all on business and simply give the Attorney General broader powers to act in case of fraud.

Any person offering securities in disregard of these laws may incur severe penalties. The sales he sought to make may become void or voidable, and he may have to return to the purchasers the money he originally received. The safest procedure for one not thoroughly familiar with these laws is to secure the advice of an attorney familiar with their requirements before offering securities for sale. Banks and the larger bond houses that retail securities will usually direct any inquiries to a specialist on this somewhat intricate phase of modern statutory law.

PURPOSE OF BLUE SKY LAWS.—The old-fashioned fraud statutes of this country left a place in the commercial life for the application of the common law principle of caveat emptor, and in no part did it come to be applied with less satisfactory results than in the sale of worthless securities. England and other European countries had already realized the need of their people for protection, and had passed statutes against the sale of worthless and fraudulent securities. In 1911 need for somewhat similar enactments was felt in this country. In that year Kansas passed its **first blue sky law** to protect its citizens from the worthless securities and get-rich-quick schemes which unscrupulous promoters were selling and promoting throughout the state. They would locate in another state, organize a corporation with an enormous amount of issued capital stock, but with little or no assets of value, enter Kansas, sell their worthless stuff, and then depart. There was then no restriction in the corporation law of the state sufficiently effective to cope with the situation. The first Kansas law was crude and was soon upset by the Supreme Court, but was

later replaced by another better law drawn in the light of experience. Other states soon followed until the present blue sky legislation became general.

Fraudulent promoters were called "fly-by-nighters" as they flew in obscurity from the state as quickly as they had entered, escaping as it were, in the dark, from the victims they had fleeced. They were said to capitalize their corporations out of the blue sky and were therefore called "blue sky merchants," and the laws against them "blue sky laws."

NEED OF BLUE SKY LAWS.—The Congressional Committee on Interstate and Foreign Commerce, which made a very exhaustive investigation of all phases of "blue sky" matters at the time the **Federal Blue Sky Law** was introduced in Congress, stated in its report to Congress under date of March 2, 1922:

"It has been officially estimated that the people of this country have lost as much as $500,000,000 annually through the sale of fraudulent and worthless securities. The Treasury Department estimated that $400,000,000 worth of Liberty bonds were taken from purchasers in some of the States in the Middle West in a few months in exchange for worthless or doubtful securities that promised larger returns.

"A prominent Oklahoma newspaper made an investigation of the stock-selling oil companies in Oklahoma in 1917. It found that the stock promoting companies produced less than two one-thousandths of 1 per cent of all the oil produced there in that year. For every $555 of capitalization only $1 worth of oil was produced."

The integrity of securities can be assured by making certain of the probity of the dealers in them, also by examination of the securities by competent state authorities. This was clearly stated by the Supreme Court in *Hall* v. *Geiger-Jones*, 242 U. S. 539, as follows:

"The integrity of the securities can only be assured by the probity of the dealers in them and the information which may be given of them. This assurance the state has deemed necessary for its welfare to require; and the requirement is not unreasonable or inappropriate. It extends to the general market something of the safeguards that are given to trading upon the exchanges and stock boards of the country—safeguards that experience has adopted as advantageous. Inconvenience may be caused and supervision and surveillance, but this must yield to the public welfare; and against counsel's alarm of consequences, we set the judgment of the state."

VARIOUS TYPES OF STATE BLUE SKY LAWS.—Among the various blue sky laws now in existence in this country some are hardly more than **fraud statutes** which give the Attorney General the right to restrain the offering of an issue which to him may seem likely to cause an irrevocable public injury. Any party aggrieved by an order of the Attorney General restraining the offering of an issue in this way has the right of a hearing, generally before a state court designated in the Act. Maryland has a law of this character. On the other hand, laws of certain states require dealers, agents and the issue to be qualified before the issue can be offered in that state. A thorough examination is made of each. The Michigan law is of this character. Illinois, on the other hand, requires simply the qualification of the securities and not the licensing of dealers and agents. Different classes of laws with various modifications have, up to this time, been passed in all the states, except Colorado and Nevada.

PRELIMINARY APPROVAL.—Where a short space of time is permitted in which to do the qualifying work, a preliminary approval of the offering should be requested in those states which make a practice of granting it. The following states in one form or another formally grant a preliminary approval:

Massachusetts	Wisconsin
Rhode Island	Georgia
Michigan	Missouri
Illinois	

On an offering of securities in Massachusetts or Rhode Island it is sufficient for the dealer licensed in those states to mail a **"notice of intention,"** as it is called, to the state authorities, which notice advises them of the offering of the securities in those states. In Michigan the granting of preliminary approval is not obtained automatically by filing a notice, as in Massachusetts and Rhode Island. On forwarding certain preliminary papers and paying the fee, the Michigan Securities Commission may or may not grant such preliminary approval. The Illinois Law provides for granting preliminary approval of Class C securities in a somewhat similar manner to the Michigan law, except that it requires with the preliminary papers a "consent to service" executed by the party requesting the same, or by the issuing company. It is discretionary with the Secretary of State of Illinois to grant it. Wisconsin requires simply a notification that the offering is to be qualified as a Class A offering. The licensed dealer in Wisconsin may offer Class A securities on giving the commission notice which automatically constitutes a preliminary permit. Georgia requires a notice of intention quite similar to the Massachusetts notice and with the same effect. Michigan, Illinois and Wisconsin require the filing of a bond to assure the filing of final papers for qualification of the issue. In Indiana, under its recent act, a bond may be given and certain specified classes of securities registered by notification.

WHEN APPLICATION FOR PRELIMINARY APPROVAL SHOULD BE MADE.—Where dealers underwrite or purchase large offerings running into many millions and offer them to the public, it is imperative that they apply promptly for preliminary approval in the states where it is required. It is not possible in most cases to obtain the signature of the issuing company to the "blue sky" papers prior to the closing of the deal by the signing of the purchase or underwriting contract. Dealers carrying large commitments of this character on their books are obliged to offer them within 2 or 3 days after their purchase, because in offering them, they are subject to market conditions which are constantly varying. Often high-grade securities are sold by dealers the same day that they are offered to the public, that is, such securities are off the books of the dealers within 2 or 3 days after the date of signing the underwriting agreements.

Preliminary papers may often be made up by the dealer with the information which he has with respect to the issue, prior to the signing of the purchase contract. The final papers, however, cannot be so executed, but as soon as the deal is closed they should be placed in the hands of the company for execution and returned to the dealer for filing. In large offerings it is extremely important, if possible, that the issue be brought within the scope of **the exemptions** which are found in most of the statutes, for if the issue comes within such exemptions all, or a large part of the "blue sky" work, is unnecessary. Unfortunately, this burden on legitimate business falls much harder on the high-grade underwriter who is offering securities continually, than upon the fraudulent fly-by-nighter type of salesmen, who makes his fraudulent transactions in one of two states and then leaves it. Furthermore, the high-class underwriters generally operate on a narrow profit of approximately 5 points, and rarely over 10, so that their operations have got to be put through quickly on the market for which they bargain.

FINAL QUALIFICATION PAPERS.—These should be sent by the party offering the securities to the company issuing them as soon as possible, with instructions to that company to fill them in completely, and return them for filing with the state commission. If the company issuing the securities is itself applying for qualification of its own issue, it should complete the papers and forward them to the commission. Any failure to fill these papers out and furnish all the information that the commission requests is likely to be followed by the return of the papers with a request on the part of the commission to furnish everything that has been omitted. The application will be hastened by forwarding to the commission with the completed papers a **certified audit of the company** and any documents tending to enhance the strength of the securities for which application for qualification is made.

TESTS APPLIED BY STATE COMMISSIONS.—The state commissions apply their own tests to determine whether the issue is worthy of a permit, and in those states which do not issue permits, whether they are worthy of sale in those states. These tests differ but in a general way may be summarized as:

1. Character test
2. Asset or property test
3. Earning test
4. Speculative and non-speculative issue test
5. No apparent or particular test

Character Test.—In **Massachusetts** the test may be described as a character test. The Department of Public Utilities of Massachusetts does not require extensive data so long as the application indicates that the principals are above reproach, and that the offering is high-grade.

Asset or Property Test.—**Michigan** looks particularly at the fixed assets, requiring an appraisal of the real property, and usually a segregation in the appraisal of the land, buildings, and equipment. A corporation which can show a large real estate item on its balance sheet and a substantial item of buildings and equipment, offers a good issue to present to the Michigan Commission, particularly if an independent and true valuation of the properties revealing that the securities to be offered are not over 60% of such valuation can be forwarded with the application.

Earning Test.—**Illinois and Wisconsin,** however, look principally at the potential strength of the issuing company, rather than at its present asset position. The test is upon the **earning power** of the company over a period of two years stated separately, or over an average period of years. A company, therefore, which has a very high income has a particularly good issue to qualify in either of these states. The state authorities in each are keen in **analysing income accounts and surplus accounts** over the period for which the income is given. There are times when an issue will qualify in certain states and not in others, because the test in the various states is not a uniform one.

Speculative and Non-Speculative Issue Test.—The states of Illinois and Wisconsin distinguish between securities which have an established income and those which have not, and which are termed **speculative securities.** In Illinois the non-speculative issues are the Class C securities, while this class in Wisconsin is the Class A. The recent Indiana Law has some suggestion of each of the Illinois and Wisconsin Laws. The West Virginia Law and a few other laws of the southern states distinguish between non-speculative and speculative issues.

No Apparent or Particular Test.—Some states have no very apparent test by which they determine the fitness of an issue. In those states where a qualification is required the following features should be shown, if possible:

High character
Substantial earnings
Substantial fixed assets, such as land and buildings

Anyone offering securities in several states should understand fully the requirements he has to meet. He should also be careful not to offer or sell any securities until the proper approval has been received.

In furnishing papers to the commissions it is quite likely that they will take an independent position and call for still further papers. In that case it is not wise to argue and antagonize the commission but to furnish what they require as quickly as possible.

EXEMPTIONS OF SECURITIES FROM BLUE SKY LAWS.—There is in many of these acts a section which enumerates certain securities, the inherent qualities of which assure their sale and disposition without the perpetration of fraud, and which are, therefore, **exempt from the necessity of qualifying.** It is exceedingly advantageous to bring the issue which is being offered for sale within a class of securities exempted thereby avoiding the burden of qualifying such issues. Very little "blue sky" work then need be done, inasmuch as the series of states in which that class of securities is exempt is instantly eliminated.

Securities which are usually exempted from the operation of the various state security laws are:

1. Governmental issues
2. Security issues listed on stock exchanges
3. Public utility issues

Any party involved in qualifying securites under the various blue sky laws will find it a simple matter to dispose of an issue if it falls in any one of these three classes, for each of these classes of exemptions is found as hereafter shown running through many laws. If one, therefore, takes from the laws the paragraphs mentioned and classifies them with the headings, (1) governmental exemptions, (2) stock exchange exemptions and (3) public utility exemptions, he will have a method of disposing instantly of a large number of issues throughout a large part of the United States.

Many of the law sections containing the exemptions provide that the securities exempted therein are exempt from the entire act. It is not necessary under such provisions to have the dealer or agents, or the securities themselves, licensed in those states which otherwise require such licensing. If the sections provide that the securities enumerated therein are exempt, except as hereinafter provided, or from another section in the act, it is then necessary to comply with the other provisions of the act from which the securities are not specifically exempted.

Governmental Issues.—Government issues constitute a class that is **generally found exempted.** Suppose, for example, that a bond house is selling United States bonds, Liberty bonds or others. The first paragraph of Section 4 of the Illinois Securities Act includes among those securities which are not subject to the provisions of the Act, those "issued or guaranteed by a government or governmental agency or by any body having power of taxation or assessment."

Under this provision securities issued by a government are exempt. This provision would exempt securities issued by any government. The added provision "guaranteed by a government" would exempt a Japanese Industrial

ssue guaranteed by the Japanese government, or any issue guaranteed by any o'ernment. The next phrase reads, "or governmental agency." This would, or example, exempt securities of a railroad owned by a government. The ext provision in this short paragraph, "or by any body having power of tax- tion or assessment," would exempt state bonds, municipal bonds, county onds, not only of this country but of any other country.

Security Issues Listed on Stock Exchanges.—The second class of securities hich are generally exempt is composed of those which have been listed and ealt in on stock exchanges enumerated within the said exemption section. or example, the following provision taken from the Wisconsin Act, Section 91 (d), exempts: "Securities listed upon the New York, Boston or Chicago tock exchange pursuant to official authorization by such exchange and securities enior to any securities so listed."

Securities listed on these foremost exchanges are exempt because these issues nd the companies issuing them are very thoroughly examined before the ssues are permitted to be listed. Therefore, if the exchange has already made n examination of the issue, there is no reason for the commission to do so. relies on the exchange. The phrase in the paragraph above quoted reading and securities senior to any securities so listed" **opens this exemption wider.** uch securities might be bonds of a corporation whose common stock was listed n one of these exchanges. The foundation for this added provision is that if he common stock of the company is exempt, a bond of the company, which is enior to the stock, should also be exempt. The preferred stock of a company senior to the common stock and would be exempt if the common stock were sted. Likewise, if the preferred stock was listed, any and all mortgage bonds f such a company would be senior, and so exempt, and if the junior bonds ere listed, the senior bonds would be exempt. For the purpose of financing y security issues it is a **distinct advantage** for a corporation **to have its junior ssues listed on one of the recognized exchanges.**

Public Utility Issues.—There is a third class of securities generally exempted hich is as important as the first two just mentioned, that is, public utility sues. For example, Section 2, paragraph C, of the Minnesota Law exempts: Securities of public or quasi-public corporations the issue of which securities regulated by a public service commission of this state or any state or territory f the United States or securities senior thereto."

Public utility corporations are quasi-public corporations and usually have een free from fraud. There is a further protection for this class if the issue is egulated by a public service commission, a separate body passing upon the sue, or in some way regulating the issuing company. The general provision, hich is found in the exemption section of many laws, varies somewhat from hat above stated. Some exempt securities of a public utility where the company regulated; others, however, exempt the securities of companies whose rates re regulated. Securities senior to these specifically exempted are usually cluded in this class. This class also opens up a large body of securities.

LEGAL PROVISIONS EXEMPTING GOVERNMENTAL SECURITIES.—he laws of the following states contain the provisions shown below exempting overnmental issues either from the provisions of the entire act or from that ction of the act requiring the qualification of securities.

Alabama

9879. Exempted securities and sales. Except as hereinafter provided, the provisions this article shall not apply to any security which at the time of the sale thereof is within y of the following classes of securities.

(a) Any security issued or guaranteed by the United States or by any territory or insular possession thereof, or by the District of Columbia, or by any state or political, public taxing subdivision, or agency thereof.

(b) Any security issued or guaranteed by any foreign government with which the United States is then maintaining diplomatic relations, or by any state, province, or political subdivision thereof having the power of taxation or assessment.

Arizona

The following bonds are exempt under Paragraph 2259, the law of Arizona.

Bonds of the United States, the State of Arizona, or bonds of some county, city, town or school district.

Arkansas

Section 3. The provisions of this act shall not apply to:

(a) Securities of the United States or any foreign government, or any state or territory thereof, or of any county, city, township, district or other public sub-taxing division of any state or territory of the United States or any foreign government.

Colorado

Section 14. The provisions of this Act shall not apply to any of the following classes of securities:

(a) Any security issued or guaranteed by the United States, or any territory or insular possession thereof, or by the District of Columbia, or by any state or political subdivision or agency thereof, or by any domestic corporation not for profit.

(b) Any security issued or guaranteed by any Foreign Government with which the United States is maintaining diplomatic relations at the time of sale or offer for sale of such security, or by any state, province or political subdivision thereof, having the power of taxation or assessment.

Georgia

Section 8. Securities in Class "A" shall comprise:

(1) Those issued or guaranteed by the United States or any territory or insular possession thereof or by the District of Columbia, or by any state or political subdivision or agency thereof.

(2) Those issued or guaranteed by any foreign government with which the United States is at the time of the sale or offer of sale thereof maintaining diplomatic relations, or by any state, province or political subdivision thereof having the power of taxation or assessment.

Securities in Class "A" and the sale thereof shall not be subject to the provisions of this Act.

Illinois

Section 4. Securities in Class "A" shall comprise securities:

(1) Issued or guaranteed by a government or governmental agency, or by any body having power of taxation or assessment.

Securities in Class "A" and the sale thereof shall not be subject to the provisions of this Act.

Indiana

Section 4. Except as hereinafter otherwise expressly provided, the provisions of this act shall not apply to the following classes of securities.

(a) Any security issued or guaranteed by the United States or any territory or insular possession thereof, or by the District of Columbia or by any state or political subdivision or agency thereof having the power of taxation or assessment.

(b) Any security issued or guaranteed by any foreign government with which the United States is at the time of the sale or offer for sale thereof, maintaining diplomatic relations, or by any state, province or political subdivision thereof having the power of taxation or assessment.

Iowa

Section 1920-ul. The provisions of this act shall not apply to:

(a) Securities of this state, or of the United States or of any state or territory thereof, or of any foreign government or of any district, county, township, city, town or other

public taxing subdivision of any state or territory of the United States, including all drainage, county, school or other municipal bonds of this state.

Kansas

Section 9465. The provisions of this act shall not apply to:

(a) Securities of the United States; or any foreign government; or of any state or territory; or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

Kentucky

Section 3. The provisions of this Act shall not apply to:

(a) Securities of the United States; or any foreign government; or any state or territory thereof, or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States, or any foreign government.

Louisiana

Section 8. Be it further enacted, etc., That when the Commissioner has issued a license to a dealer or investment house, he may, without further special authority from the Commission, deal in any of the following classes of securities:

(a) Securities of the United States; or any foreign government; or of any State or Territory; or of any parish, county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

Massachusetts

Section 3. Except as hereinafter provided, provisions of this chapter shall not apply to:

(c) Any security issued or guaranteed as to principal or interest by a government or governmental agency, or by any public body having power of taxation or assessment.

Michigan

Section 4. Except as hereinafter provided the provisions of this act shall not apply to any security which at the time of the sale thereof is within any of the following classes of securities:

(a) Any security issued or guaranteed by the United States or any territory or insular possession thereof, or by the District of Columbia, or by any state or political subdivision or agency thereof.

(b) Any security issued or guaranteed by any foreign government with which the United States is maintaining diplomatic relations, or political subdivision thereof having the power of taxation or assessment.

Minnesota

Section 2. The provisions of this act, except Section 10 thereof, shall not apply to:

(a) Securities of the United States or any foreign government; or of any state or territory thereof; or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

Mississippi

Section 14. The terms of this act shall not apply to:

(a) Securities of this state, or of the United States, or of any state or territory thereof, or any foreign government or of any district, county, township, city, town or other public taxing subdivision of any state or territory of the United States, including all drainage, county, school or other municipal bonds of this state.

Missouri

Section 4. Except as hereinafter provided, the provisions of this act shall not apply to any security which is within any of the following classes of securities:

(a) Any security issued or guaranteed by the United States or any territory or insular possession thereof, or by the District of Columbia, or by any state or political subdivision or agency thereof.

(b) Any security issued or guaranteed by any foreign government with which the United

States is at the time of the sale thereof, maintaining diplomatic relations, or by any state, province, or political subdivision thereof having the power of taxation or assessment.

Montana

Section 1. The following securities are excepted from the provisions of the Act.

Bonds of the United States, State, County, or Municipal bonds or warrants, stock of State or National Banks located in the State of Montana.

Nebraska

Section 2. The provisions of this article shall not apply to:

(a) Securities of domestic or foreign countries, municipalities, governments or governmental agencies.

New Mexico

Section 8. The provisions of this act shall not apply to:

(a) Securities of the United States; or any foreign government or of any state or territory, or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

New York

359-f. The provisions of subdivision two of section three hundred and fifty-nine shall not apply to any transactions relating to the sale or offering for sale of any of the following described securities by a dealer therein.

(a) Any security issued, or guaranteed by the United States or any territory or insular possession thereof, or by the District of Columbia or by any state or political subdivision or agency thereof.

(b) Any security issued or guaranteed by any foreign government with which the United States is at the time of the sale or offer for sale thereof maintaining diplomatic relations, or by the Dominion of Canada or by any province or political subdivision thereof.

North Dakota

Section 9. The provisions of this act shall not apply to:

(a) Securities of the United States; or any foreign government or of any state or territory; or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

Oklahoma

Section 10. The provisions of this Act shall not apply to:

(a) Securities of the United States, or any foreign government; or of any state or territory; or of any county, city, township, school district or other public taxing subdivision of any state or territory of the United States or any foreign government.

Oregon

Section 6839. The provisions of this section shall not apply to:

(e) To bonds or other evidences of indebtedness of the United States of America, or of any foreign government, or political subdivision thereof, or of any state or territory of the United States of America or of any municipal or public corporation of such government, state or territory. (As amended by Chap. 189, Laws of 1923.)

Pennsylvania

Section 2. None of the following transactions shall constitute the person or company engaging therein a "dealer" within the meaning of this act; that is to say, a sale, offer for sale, solicitation, subscription, invitation, dealing in, or delivery:

(1) Of a security issued or guaranteed by any of the following: the United States of America, or a state, territory, insular possession, political subdivision, or agency thereof, the District of Columbia, a national bank corporation created or acting as an instrumentality of the Government of the United States pursuant to the authority of Congress.

Rhode Island

Section 3. The provisions of this act shall not apply to:

(c) Any security issued or guaranteed as to principal or interest by a government or governmental agency, or by any public body having power of taxation or assessment, excepting currency issued by such government.

South Carolina

Section 4230. The provisions of this article shall not apply to:

(a) Securities of the United States, or any foreign government; or of any state or territory thereof, or of any county, city, township, district or other public taxing subdivision of any State or Territory of the United States, or any foreign government.

South Dakota

Section 10129. The provisions of this chapter shall not apply to:

(1) Securities of the United States, or of any foreign government, of any State or Territory of the United States, or of any County, City, Township, District or other public taxing subdivision of any State or Territory of the United States, or of any foreign country.

Tennessee

Section 1. The following bonds are exempt from the Act.

Bonds of the United States, the State of Tennessee, or of some municipality of the State of Tennessee.

Utah

Section 2. The provisions of this Act shall not apply to:

(a) Securities of the United States, or any foreign government or any state or territory thereof, or of any county, city, township, district or other public taxing subdivision of any state or territory of the United States or foreign government.

Vermont

Section 5451. The following bonds are exempt from the Act.

Bonds of the United States, the State of Vermont, Municipalities of the State.

Virginia

Section 9. The provisions of this act shall not apply to:

(a) Securities of the United States; or any foreign country; or of any state or territory; or of any county, city, township, district or other taxing subdivision of any state or territory of the United States or any foreign government.

Wisconsin

Section 1753-49. Except as hereinafter provided the provisions of sections 1753-48 to 1753-68 inclusive, shall not apply to:

(a) Securities issued by or the principal and interest of which are guaranteed by the United States or any foreign government, or by any state or territory thereof or by any county, city, township, village, district, or other political or taxing subdivision or any state or territory of the United States or any foreign government.

Wyoming

Section 5111. The provisions of this act shall not apply to:

(a) Securities of the United States, or any foreign government, or of any state or territory, or any county, city, township, district or other public taxing subdivision of any state or territory of the United States or any foreign government.

LEGAL PROVISIONS EXEMPTING LISTED SECURITIES.—The laws of following states contain the provisions shown below exempting stock exchange issues either from the provisions of the entire act or from that section of the act requiring the qualification of securities.

Alabama

9879. Except as hereinafter provided, the provisions of this article shall not apply to any security which at the time of the sale thereof is within any of the following classes of securities:

(f) Securities issued, outstanding, distributed, and fully listed upon any organized stock exchange having an established meeting place in a city of over five hundred thousand population according to the last preceding United States census and providing facilities for the use of its members in the purchase and sale of securities listed by such exchange, and securities senior thereto and evidences of indebtedness guaranteed by companies, the common capital stock of which is so listed; and upon such other stock exchanges as the commission may from time to time by written order designate. If actual transactions on such organized exchange have occurred during each of the preceding twenty years in the purchase and sale of United States bonds or other bonds of any of the classes exempted herein from the provisions of this article, and if such stock exchanges require financial statements to be submitted at the time of such listing and annually thereafter.

Colorado

Section 14. The provisions of this Act shall not apply to any of the following classes of securities:

(f) Any security of any concern having outstanding securities regularly listed on the New York Stock Exchange or Chicago Stock Exchange or Boston Stock Exchange or New York Curb Association.

Georgia

Section 8. Securities in class "A" shall comprise:

(7) Those appearing in any list of securities dealt in on the New York, Chicago or Philadelphia Stock exchange or other stock exchanges of like standing to be selected by the Securities Commission, pursuant to official authorization by such exchanges, and securities senior to any securities so appearing whereof the current prices shall have been quoted from time to time for not less than one year next preceding the offering for sale thereof in tabulated market reports published as news and not as advertisements in a daily newspaper of general circulation in this state.

Note: The Commission has added the Boston Stock Exchange to those named above.

Securities in class A and the sale thereof shall not be subject to the provisions of this Act.

Illinois

Section 4. Securities in Class "A" shall comprise:

(d) Listed and dealt in on the New York, Boston or Chicago Stock Exchange, respectively, pursuant to official authorization by such exchanges, respectively, and securities senior to any securities so listed and dealt in, or guaranteed by any corporation the common capital stock of which is so listed and dealt in.

Securities in Class A and the sale thereof shall not be subject to the provisions of this Act.

Indiana

Section 4. Except as hereinafter otherwise expressly provided, the provisions of this Act shall not apply to any of the following classes of securities:

(f) Securities appearing in any list of securities dealt in on the New York stock exchange or on any other recognized and responsible stock exchange which has been previously investigated and approved by the commission and which securities have been so listed pursuant to official authorization by such exchange and also all securities senior to any securities so listed, or evidences of indebtedness guaranteed by companies any stock of which is so listed, such securities to be exempt only so long as such listing shall remain in effect: Provided, however, That the commission may at any time withdraw its approval of any such stock exchange; and Provided, further, That the commission may at any time for cause withdraw its approval of any security so listed on the New York stock exchange or any other approved stock exchange, and thereafter such security shall not be entitled to the benefit of this exemption, except upon further order of the commission.

Kentucky

Section 3. The provisions of this Act shall not apply to:

(j) Securities listed on any stock exchange recognized by the Banking Commissioner of securities senior thereto; Provided, however, that the Banking Commissioner shall have the power to suspend temporarily or permanently the sale of such securities by any person, firm or corporation when in the opinion of the Banking Commissioner the sale of such security or securities would work a fraud upon the purchasers thereof.

Louisiana

Section 8. Be it further enacted. That when the Commissioner has issued a license to a dealer or investment house, he may without further special authority from the Commission, deal in any of the following classes of securities:

(g) Securities which are listed on stock exchanges in cities of 100,000 and over, the status of which exchanges is attested to by the majority of clearing house boards in the community in which such exchanges are located.

Massachusetts

Section 3. Except as hereinafter provided the provisions of this chapter shall not apply to:

(e) Securities listed upon any stock exchange in Massachusetts which has been doing business continuously for the last ten years prior to the effective date of this chapter and all securities senior thereto, for six months from the effective date of this chapter; and thereafter provided that there has first been submitted to the commission a form of application and set of rules adopted by such exchange for the listing of securities which is acceptable to the commission, as indicating in substance that the requirements of such exchange are adequate to guard against fraud, and provided further that any subsequent change in the rules of such exchange shall not affect the exemption of securities listed before said change was adopted.

The commission may add to this exemption sales or securities listed upon any other organized stock exchange.

Missouri

Section 4. Except as hereinafter provided the provisions of this Act shall not apply to any security which is within any of the following classes of securities:

(f) Securities which at the time of the sale thereof are issued, outstanding, distributed, and fully listed upon duly organized stock exchanges to be approved by the commissioner, and securities senior to any security so listed upon any of such exchanges, and evidences of indebtedness guaranteed by any company the common capital stock of which is so listed upon any of such exchanges.

New York

The provisions of subdivision two of section three hundred and fifty-nine shall not apply to any transactions relating to the sale or offering for sale of any of the following described securities by a dealer therein:

(k) Securities which on January first, nineteen hundred and twenty-five, have been fully listed upon any exchange, located in the state of New York, which on said date was organized and in operation, and so long thereafter as the same shall remain so listed and any securities senior thereto. Securities which shall become fully listed upon any such exchange subsequent to said January first, nineteen hundred and twenty-five, shall not be exempted as herein provided unless and until such exchange shall cause to be duly published pursuant hereto in the state paper as defined herein, under the caption or head described in section three hundred and fifty-nine of this chapter, a notice which shall contain the name of the corporation, association, common law trust or similar organization issuing the security or securities so listed, the business or post office address thereof, the state or county where incorporated or organized, the date of such listing and a brief description and the amount of the security so listed. After such publication of said notice as aforesaid, securities so listed subsequent to January first, nineteen hundred and twenty-five, and any securities senior thereto, shall thereupon be exempted hereunder so long as the same shall remain so listed.

Oregon

Section 6839. The provisions of this Section shall not apply to:
(a) Securities listed on the New York or Chicago stock exchanges, or securities of companies not objected to by the corporation commissioner and listed in any standard manual or supplements thereto and securities of subsidiary companies and successors of such listed companies as are not objected to by the corporation commissioner.

Rhode Island

Section 3. The provisions of this Act shall not apply to:
(e) Securities listed upon such regularly organized stock exchange as the commission may from time to time specify.

Wisconsin

Section 1753-49. Except as hereinafter provided, the provisions of Sections 1753-48 to 1753-68 inclusive, shall not apply to:
(d) Securities listed upon the New York, Boston or Chicago stock exchange pursuant to official authorization by such exchange, and securities senior to any securities so listed.

LEGAL PROVISIONS EXEMPTING PUBLIC UTILITY SECURITIES.—The laws of the following states contain provisions shown below exempting issues of public utilities, either from the provisions of the entire act or from the provisions of the section requiring qualification.

Alabama

9899. Except as hereinafter provided, the provisions of this article shall not apply to any security which at the time of the sale thereof is within any of the following classes of securities:
(d) Any security issued or guaranteed either as to principal, interest, or dividend, by a corporation owning or operating a railroad or any other public utility; provided, that such corporation is subject to regulation or supervision either as to its rates and charges or as to the issue of its own securities by a public commission, board, or officer of the government of the United States, or of any state, territory, or insular possession thereof, or of the District of Columbia, or of the Dominion of Canada or any province thereof.

Arkansas

Section 3. The provisions of this Act shall not apply to:
(c) Securities of public or quasi-public corporations, the issue of which securities is regulated by the Arkansas Railroad Commission or by any public service commission or board of equal authority of any State or Territory of the United States or securities senior thereto.

Colorado

Section 14. The provisions of this Act shall not apply to:
(n) Securities of Public Utilities Corporations heretofore and hereafter issued of such corporations as are subject to regulation or supervision as to the issue of any of their securities by the Interstate Commerce Commission or by a public service Commission or other similar regulative body of any state or territory of the United States.

Georgia

Section 8. Securities in Class "A" shall comprise:
(5) Those issued or guaranteed as to principal, interest or dividend by a corporation owning or operating a railroad or any other public service utility; Provided that such corporation is subject to regulation or supervision either as to its rates and charges or as to the issue of its securities by a public Commission, board or officer of the Government of the United States, or of any state, territory or insular possession thereof, or of the District of Columbia, or by the Dominion of Canada or any Province thereof.
Securities in Class "A" and the sale thereof shall not be subject to the provisions of this Act.

Illinois

Section 4. Securities in Class "A" shall comprise securities:

(3) Issued or guaranteed by any corporation operating any public utility in the United States or any state thereof or in the Dominion of Canada or any province thereof wherein there is or was at the time of issuance thereof in effect any law regulating such utilities and the issue of securities by such corporation, and evidences of indebtedness secured by collateral consisting of any securities herein above in this paragraph three (3) described, provided that such collateral securities equal in par value 125% of the par value of the evidences of indebtedness so secured.

Securities in Class "A" and the sale thereof shall not be subject to the provisions of this Act.

Indiana

Section 4. Except as hereinafter otherwise expressly provided, the provisions of this act shall not apply to any of the following classes of securities:

(d) Any security issued or guaranteed either as to principal, interest or dividend by a corporation owning or operating a railroad or any other public service utility: Provided, That such corporation is subject to regulation or supervision as to the issue of its own securities by a public commission, board or officer of the government of the United States, or of any state, territory or insular possession thereof, or of any municipality located therein, or of the District of Columbia or of the Dominion of Canada or any province thereof.

Iowa

Section 1920-ul. The provision of this act shall not apply to:

(j) Securities of corporations operating railroads, public or quasi-public utilities, the issue of whose securities, is regulated by the interstate commerce commission or by a railroad or public service commission, board or similar body of any state or territory of the United States or of any province of the Dominion of Canada, and securities of all other corporations operating public utilities in this state.

Kansas

Section 9465. The provisions of this act shall not apply to:

(b) Securities of public or quasi-public corporations, the issues of which are regulated by the Public Utilities Commission of the state of Kansas, or by the public service commission or board of similar authority of any state or territory of the United States; or securities senior thereto.

Kentucky

Section 3. The provisions of this act shall not apply to:

(c) Securities of public or quasi-public corporations, the issue of which securities is regulated by any public service commission or board of equal authority of any state or territory of the United States or securities senior thereto.

Louisiana

Section 8. That when the Commission has issued a license to a dealer or investment house, he may, without further special authority from the Commission, deal in any of the following classes of securities.

(b) Securities of public or quasi-public Corporations, the issues of which are regulated by the Louisiana Railroad Commission or by the Public Service Commission or Board of similar authority of any State or Territory of the United States; or securities senior thereto or securities of any association or corporation whose business is regulated and supervized under Associations authorized to do business in this State.

Massachusetts

Section 3. Except as hereinafter provided, the provisions of this chapter shall not apply to:

(d) Securities of, or guaranteed either as to principal, interest or dividend by, a corporation owning or operating a railroad, or any other public service utility, the issue or guarantee of such securities being regulated or controlled or requiring approval by, public officials of

this or of any other state or of the United States empowered to regulate and control or supervise public service utilities and the issue of securities thereby; and all securities senior thereto. Securities issued by a holding corporation holding or owning solely securities within the provisions of subdivision (c) of this section and the above sentence of this subdivision (d) and issuing its own securities against such securities, not exceeding in par value the par value of such securities owned or held by it, shall be deemed to be within the provisions of this subdivision (d).

Michigan

Section 4. Except as hereinafter provided, the provisions of this act shall not apply to any security which at the time of this sale thereof is within any of the following classes of securities:

(d) Any security issued or guaranteed either as to principal, interest or dividend, by a corporation owning or operating a railroad or any other public service utility; Provided, Such securities have been affirmatively passed upon by the Michigan Public Utilities Commission, or by a public commission, board or officer, with authority equal to that of the Michigan Public Utilities Commission, of the government of the United States, or by any state, territory, or insular possession thereof, or of the District of Columbia, or of the Dominion of Canada, or any province thereof, and who by law are charged with the supervision of such securities;

Minnesota

Section 2. The provisions of this act except section 10 thereof, shall not apply to:

(c) Securities of public or quasi-public corporations, the issue of which securities is regulated by a public service commission of this state or of any state or territory of the United State, or securities senior thereto.

Mississippi

Section 14. The terms of this act shall not apply to:

(c) Securities of public or quasi-public corporations, the issue of which securities is regulated by any public board or commission now or hereafter created by the laws of this state.

Missouri

Section 4. Except as hereinafter provided, the provisions of this act shall not apply to any security which is within any of the following classes of securities:

(d) Any securities issued or guaranteed either as to principal, interest, or dividend by a corporation owning or operating a railroad or any other public service utility; Provided, that such corporation is subject to regulation or supervision either as to its rates and charges or as to the issue of its own securities by a public service commission, board or officer of the government of the United States, or of any state, territory, to insular possession thereof, or of the District of Columbia or of the Dominion of Canada or any province thereof.

Nebraska

Section 2. The provisions of this article shall not apply to:

(d) Securities of public utility corporations or common carriers, whether domestic or foreign in origin.

New York

Section 359-f. The provisions of the act shall not apply to:

(d) Any security issued or guaranteed by a public service or utility corporation including a railroad corporation, provided such corporation is subject to regulation or supervision either as to its rates and charges or as to the issue of its own securities by a public commission, board or officer of the Government of the United States, or of any territory, or insular possession thereof, or of any state or municipality or other political subdivision thereof, or of the Dominion of Canada, or any Province thereof; also equipment and trust certificates or equipment notes or bonds based on chattel mortgages, leases, or agreements for conditional sale of cars, motive power, or other rolling stock mortgaged, leased or sold to or furnished for the use of or upon such a railroad or other public service utitity corporation, or equipment trust certificates, or equipment notes or bonds where the ownership or title of such equipment is pledged or retained in accordance with the provisions of the laws of the

United States, or of any State, territory or insular possession thereof, or of the District of Columbia, or of the Dominion of Canada, or of any Province thereof, to secure the payment of such equipment trust certificates, bonds, or notes.

North Dakota

Section 9. The provisions of this Act shall not apply to:
(b) Securities of public or quasi-public corporations, the issues of which are regulated by a state officer of the state of North Dakota, or by a state officer or board of similar authority of any state or territory of the United States; or securities senior thereto.

Ohio

Section 6373-2. The term "securities" as used in this Act, shall not be deemed to include,
(2) Securities of quasi-public corporations, the issuance of which has been authorized by the public service commission of this state.

Oklahoma

Section 10. The provisions of this act shall not apply to:
(b) Securities of public or quasi-public corporations, the issues of which are now regulated by the public service commission or board of similar authority of any state or territory of the United States, or securities senior thereto.

Rhode Island

Section 3. The provisions of this act shall not apply to:
(d) Securities of a corporation owning or operating a railroad or any other public service utility, which may be issued by or guaranteed either as to principal, interest or dividend by such corporation; Provided, that the securities of such corporations are regulated, controlled, or their issue approved by a public officer or officers of the government of the United States, or of any state, territory, district or insular possession thereof, or by any officer or officers of the Dominion of Canada or its provinces thereof, and all securities senior thereto.

South Carolina

Section 4230. The provisions of this article shall not apply to:
(c) Securities of public or quasi-public corporations, the issue of which securities are regulated by a public service commission or board of equal authority of the United States or of any State or Territory of the United States or securities senior thereto

South Dakota

Section 10129. The provisions of this chapter shall not apply to:
(3) Securities of public or quasi-public corporations, the issue of which securities is regulated by the Board of Railroad Commissioners of this State, or by a pubilc service commission or board of equal authority of any State or Territory of the United States or securities senior thereto.

Utah

Section 2. The provisions of this act shall not apply to:
(c) Securities of public corporations, the issuance of which is regulated by public service commissions or boards of supervision, in this state or any other state or territory of the United States.

Vermont

Section 5451. The provisions of this section shall not apply to:
Bonds, stocks, or notes of corporations which have been approved by the public service commission, or other governmental authority, of any state or of the United States.

Virginia

Section 9. The provisions of this act shall not apply to:
(b) Securities of public service or utilities corporations after organization, which are regulated by the commission or by the public service commission or board of similar authority of any state or territory of the United States; or securities senior thereto.

Wisconsin

Section 1753-49. Except as hereinafter provided the provisions of sections 1753-48 to 1753-68 inclusive, shall not apply to:
(c) Securities of corporations operating railroads or public utilities, the issue of whose securities is regulated by the commission, or by a railroad or public service commission board or similar body of the United States or of the Dominion of Canada or of any state or territory of the United States or of the Dominion of Canada and securities senior thereto; and equipment securities evidencing rights to receive partial payments agreed to be made under any contract of leasing or conditional sale of rolling stock for use of companies operating steam railroads.

Wyoming

Section 5111. The provisions of this act shall not apply to:
Securities of public or quasi-public corporations, the issue of which are regulated by the public utilities commission or board of similar authority of any state or territory of the United States.

SELLING SECURITIES TO EXEMPT PURCHASERS.—In those states where for any reason it is not practical or possible for dealers, brokers or others to qualify an issue, and the state laws provide that sales of securities to certain purchasers are exempt, a practice has sprung up of restricting the offering when made to such exempt purchasers. Pennsylvania, for example, requires that for a **dealer** to sell in that state he must be **licensed therein.** A dealer not holding such a license may, however, sell to the purchasers who are exempted from the act. Such a dealer may then place the following restrictive provision below his advertisement of the issue in the Pennsylvania papers: "The above offering is confined to banks, savings institutions and trust companies created under the laws of Pennsylvania and to persons and companies registered under 'The Securities Act' approved June 14, 1923."

Such wording restricts the offering to that particular class made exempt under The Securities Act, Section 2, Sub-section C-5, which provides that sales made in Pennsylvania shall not constitute a dealer engaging therein as a dealer and require licensing under the act when made—"to any bank, savings institution, or trust company created under the laws of this Commonwealth, or to any person or company registered under the provisions of this act."

In offering in this way to persons and institutions exempted as purchasers in certain of the State acts, the party so offering must make sure that the exemption is from the entire act and not simply from that provision in the act which requires the qualifying of the securities, unless the selling dealer and his agents making the offering are not required to be licensed. If, however, the selling dealer and his agents are licensed under an act, he may offer securities exempted from any of the provisions of that act, and is properly qualified to sell to exempt purchasers as well as those requiring qualification.

SALE OF SECURITIES AS INTERSTATE COMMERCE.—The question frequently comes up whether the sale of securities conducted along the lines of interstate commerce is subject to the provisions of these laws. The **itinerant salesman** for example, who travels through a state selling securities therein and who refers for acceptance and delivery the orders he receives back to his home or other office outside of such state is **engaging in interstate commerce.** Under

the state license tax laws such business has been held to be free from their application. Interstate commerce, even though such may originate and terminate in any state, cannot thus be taxed by the local states.

Brennen v. *Titusville*, 153 U. S. 289.
International Textbook Co. v. *Pigg*, 217 U. S. 91.
Hovey v. *De Long Hook & Eye Co.*, 211 N. Y. 420.
Caldwell v. *North Carolina*, 187 U. S. 622.
Crutcher v. *Kentucky*, 141 U. S. 47.
Stockyard v. *Morgan*, 185 U. S. 27.

Securities are articles of interstate commerce within the commerce clause of the Constitution:

Alabama, etc. Transportation Co. v. *Doyle*, 210 Fed. R. 173.
Campton Co. v. *Allen*, 216 Fed. R. 537.
Brasey v. *Darst*, 218 Fed. R. 482.
Geiger-Jones v. *Turner*, 230 Fed. R. 233.

BLUE SKY LAWS WITHIN THE POLICE POWERS OF STATES.—The blue sky laws do not arise under the taxing power of the state, but under the police power of the state to protect the welfare of its own citizens. The laws do not and cannot prevent the transportation of securities within their borders, and do not further attempt to regulate or interfere with them after they get there. States recognize that they have no right to interfere with their coming within their borders, and no right to interfere with them after they get there. However, the states may require that he who disposes of them in the state shall be licensed and do whatever the law prescribes, even though such securities are a part of interstate commerce. This is probably the extent to which states may by law interfere with the sale of these securities that form a part of an interstate selling of them. This is the limit of State authority as drawn in the case of *Hall* v. *Geiger-Jones Co.*, 242 U. S. 539, page 558, by the Supreme Court when in construing the Ohio law it stated:

"This certainly is only an indirect burden upon them as objects of interstate commerce, if they may be regarded as such. It is a police regulation strictly, not affecting them until there is an attempt to make disposition of them within the State. To give them more immunity than this is to give them more immunity than more tangible articles are given, they having no exemption from regulations the purpose of which is to prevent fraud or deception. Such regulations affect interstate commerce in them only incidentally. *Hatch* v. *Reardon*, 204 U. S. 152; *Ware & Leland* v. *Mobile County*, 209 U. S. 405; *Engel* v. *O'Malley*, 219 U. S. 128; *Brodnax* v. *Missouri*, 219 U. S. 285; *Banker Brothers Co.* v. *Pennsylvania*, 222 U. S. 210; *Savage* v. *Jones*, 225 U. S. 501; *Standard Stock Food Co.* v. *Wright*, 225 U. S. 540; *Trading Stamp Cases, supra.* With these cases *International Textbook Co.* v. *Pigg*, 217 U. S. 91; *Buck Stove & Range Co.* v. *Vickers*, 226 U. S. 205, and the *Lottery Case*, 188 U. S. 321, are not in discordance."

To prevent the mailing of fraudulent securities into the state, against which the states have thus been powerless, the Dennison Bill was introduced in Congress in 1922 but failed to pass Congress and become a law.

NOT APPLYING TO ISOLATED TRANSACTIONS.—It is not the purpose of these laws to prevent a bona fide owner of any securities from disposing of them for his own account if it was not in the course of repeated and successive transactions of a like character and provided that he is **not a dealer or underwriter** of such securities. These private transactions never were intended to

be regulated or interfered with by these blue sky laws. Many of the statutes contain **specific provisions** to that effect. Thus the **Michigan law** provides that it shall not apply to any security coming within the following class: "In an isolated transaction in which any security is sold, offered for sale, or delivery, by the owner thereof, or by his representative for the owner's account, such sale or offer for sale or delivery not being made in the course of repeated and successive transactions of a like character by such owner, or on his account by such representative, and such owner or representative not being the underwriter of such security."

Similarly the **Illinois statute** provides that the following class of sales shall not be subject to the provisions of the Illinois Act: "(1) An isolated sale of any security by a bona fide owner thereof or his representative, for the owner's account, such sale not being made in the course of repeated and successive transactions of a like character, and such owner not being a broker or dealer in securities or an underwriter of such securities."

Somewhat similar provisions may be found in certain of the other states.

UNDERWRITING AGREEMENTS AND REQUISITES OF BLUE SKY LAWS.—Where the dealer or broker buys or underwrites an issue for the purpose of selling same throughout the United States, or in various states thereof, such dealer or broker should insert a **provision in the underwriting agreement** that the issuing company will furnish all necessary papers, showings, documents, make all reports and do all necessary things to qualify its issue in the various states that the dealer or broker desires to sell the same, and will pay all necessary license fees in connection therewith. The state authorities in their blanks frequently insert the statement that the underwriting agreement is an exhibit and must be forwarded with the blanks. This has proved however, a somewhat obnoxious requirement, for the underwriters jealously guard the confidential and private purchase agreement from the eyes and ears of competitors.

PENAL PROVISIONS OF BLUE SKY LAWS.—Throughout these laws there are penal provisions imposing generally **fines and prison terms** on parties selling securities contrary to their provisions. Some of the laws contain provisions that sales made in violation of the law are either **void or voidable at the option of the purchaser** of the securities. In a number of the states it is provided that sales made in violation of the law are "unlawful" and such a sale has been held to be *malum prohibitum* and void, although not expressly declared to be so by the statute. (*Edward* v. *Idor*, 205 Mich. 617, 625; *Vercillini* v. *U. S. I. Realty Co.*, Minn. 196 N. W. 672.) A company violating these laws may also have its **license suspended or cancelled** by the securities commission administering the law. An agent violating the law may have his license suspended or cancelled and proceedings brought against him to enforce the penal provisions.

NEW YORK BLUE SKY LAWS.—The New York blue sky laws effective May 31, 1925, require that persons or corporations selling securities to the public **proclaim themselves as dealers** by publishing a notice in an official state paper and to give certain data on all securities offered for sale. The notice dealers must publish in the "State Paper" must set forth the following information:

1. Name(s) of dealer(s).
2. Business address(es) or post office address(es) (state which).
3. If a corporation, the State or Country in which incorporated.
4. If a partnership, the names of the partners.

Notice at Time of Offering Securities

A dealer offering a security for sale to the public which does not come within the exempt class as enumerated in Section 359-f of the Law, must before or at the time of such offering, cause to be published in the "State Paper" a further notice containing the information, other than the names of partners, required to be published in the notice mentioned above, and, in addition thereto, the following:

Name of security.
Name of the issuer. Post office address of issuer and the state or country in which organized.

This additional information must be furnished in the following form:

Name(s) of security or securities.
Name of issuer of securities.
Post office address of issuer of securities.
The state or country in which organized.

Provision is made in the Act for a single publication of the second notice in case of group or syndicate offerings; also for inclusion, in the same notice, of descriptions of two or more securities.

The Albany *Times-Union* has been designated as the "State Paper" for the year 1925. The dealer causing any notice to be published under the provisions of this Act is required to pay the publisher of said "State Paper" in advance for the publication thereof at the rate of thirteen cents per line.

Section 359-e of this Law **defines a dealer** for the purposes of this Act to include "every person, partnership, corporation, company, trust, or association except a domestic municipal corporation, who engages directly or through an agent in the business of trading in securities in such manner that as part of such business any of such securities are sold or offered for sale to the public in this State; or who deals in futures or market quotations of prices or values of any securities or accepts margins on prices or values of said securities. The business of trading in securities within the meaning of this section shall not include an isolated transaction in which a specific security is sold or offered for sale, by the owner thereof, or by his representative, for the owner's account, such sale or offer of sale not being made in the course of repeated and successive transactions of like character by such owner, or for his account by such representative, and such owner or representative not being the issuer or underwriter of such security. A sale or offer of sale to the public shall not include an isolated transaction of the nature above mentioned; any sale or offer of sale to any person engaged in the business of acquiring securities for the purpose of resale to the public; any sale or offer of sale to a banker, to a dealer or to a corporation or to any syndicate or group formed for the specific purpose of acquiring such securities for resale to the public directly or through other syndicates or groups, or any sale or offer of sale upon the floor of any exchange to a broker in securities."

Brokers who act solely as buying and selling agents for customers are not concerned directly with the publication of security lists. The law exempts **securities listed on any exchange** of the state prior to January 1, 1925. The exchanges, however, must furnish for publication the desired information on any issues listed after January 1, 1925. **Dealers in unlisted security issues** should seek competent legal advice. To the extent that they act only as brokers they are not required to publish even the preliminary notice under the law. As a large part of the unlisted security dealings are not strictly brokerage transactions, particularly where dealers buy stocks for their own account and sell them to customers, such dealers are required to publish a list of those issues sold to the public.

Certain securities are exempt from the provisions of the blue sky laws and are set forth in Section 359-f of the act as follows:

(a) and (b) [See under Legal Provisions Exempting Governmental Securities.]

(c) Any security issued by a national bank or by any federal land bank or joint-stock land bank or national farm loan association under the provisions of the Federal Farm Loan Act of July seventeenth, nineteen hundred and sixteen, or by any corporation created or

acting as an instrumentality of the Government of the United States pursuant to authority granted by the Congress of the United States.

(d) [See under Legal Provisions Exempting Public Utility Securities.]

(e) Any security issued by a corporation organized exclusively for educational, benevolent, fraternal, or reformatory purposes, and not for pecuniary profit.

(f) Any capital stock issued by a State bank, trust company or savings institution incorporated under the laws of and subject to the examination, supervision and control of any State or of the United States or of any insular possession thereof.

(g) Any security which under the laws of this State is a legal investment for savings banks or trust funds, and any securities which are underwritten or sold by any corporation under the supervision of the Superintendent of Banks of the State of New York.

(h) Any security, other than common stock, outstanding for a period of not less than five years, upon which no default exists in the payment of principal or interest and upon which no such default has occurred for a continuous immediately preceding period of five years, or in the case of preferred stock upon which dividends specified in the certificates of such stock have been paid for a continuous immediately preceding period of five years.

(i) Negotiable promissory notes, drafts, and commercial paper, provided that such issue of notes, drafts and commercial paper mature in not more than twelve months from date of issue and shall be issued within three months after the date of sale.

(j) Any bond and mortgage sold or offered for sale in an undivided whole.

(k) [See under Legal Provisions Exempting Listed Securities.]

(l) Securities sold or offered for sale at any judicial, executor's, administrator's, guardian's, or conservator's sale, or any sale by a receiver or trustee in insolvency or bankruptcy, or at a public sale by auction held at an advertised time and place.

(m) Sales by or for the account of a pledgee or mortgagee selling or offering for sale or delivery, in the ordinary course of business, to liquidate a bona fide debt, a security pledged in good faith as security for such debt.

SECTION 15

EXPORT AND IMPORT PROCEDURE

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SECTION 15

EXPORT AND IMPORT PROCEDURE

Foreign Credit Information

EFFECT OF DISTANCE ON CREDIT.—The foreign credit problem is essentially not different from the domestic credit problem. But the fact that buyer and seller are separated by a **greater distance** than in domestic transactions, and, are separated by **barriers of language,** trade customs and laws, makes it necessary to use greater care in the granting of credit in foreign trade, while at the same time the obtaining of credit information is more difficult.

Distance affects credit in many ways. The distance often **increases the length of the credit** period. If 3 months' credit from the date of arrival of the goods has become the accepted terms of sale in a certain market and product, the seller finances the transaction during those 3 months and during twice the length of the journey from his city to that of the buyer. The goods must travel to the buyer and the money or draft must make the journey back. The distance, therefore, influences the credit period, within certain limits.

The seller will also find it **more difficult to keep himself informed of the changes in the general credit situation** in the foreign market and especially to watch the individual credit risks.

CREDIT RISK AFFECTED BY RISK OF REJECTION AND TRADE CUSTOM.—The credit risk is still further increased by the difficulty and expense involved in disposing of goods refused by the buyer. It may be necessary to have them returned at great expense and with considerable delay; or it may prove better to sell the goods for what they will bring in the foreign market, as they may have been specially made up for foreign consumption and may not be salable at home.

Trade custom will often prescribe credit terms which differ greatly from those commonly granted in the domestic field, but competition compels the seller to conform to custom. The local law will determine the legality of contracts, and the method, as well as the likelihood of making collection in case of refusal of goods or insolvency of the buyer.

CREDIT INFORMATION REQUIRED.—The credit man will need to ask:

1. What is the nationality of the buyer?
2. How long has he been in business?
3. Does he exercise good merchandising judgment and does he buy conservatively?
4. Is he reliable?

Although it would be a great mistake to generalize about the honesty and **business habits of different nationalities,** the fact remains that some nationalities have an enviable reputation for fair dealing, while others are regarded

as unfavorable credit risks. There is some reason for this difference in reputation.

It is important to know how long the firm has been established. **Experience** comes only with time and the longer the business career, the more significant is the information concerning the standards of business conduct. In the single proprietorship it is also of value to know approximately the age of the proprietor and what is likely to be the fate of the business in the case of his death.

The **judgment of the customer** as a merchant may often be an open book to the visiting salesman. Antiquated stocks, ill-balanced stocks, the presence of goods which appeal to an entirely different buying public from those for which the bulk of the goods is intended are all signs which call for a more careful investigation of the risk.

The **capital of the firm** and the rate of turnover determine how much the firm should purchase, while the probable number of sources of supply indicates how much it is safe for the firm to buy from any one of them. No hard and fast rules can be laid down but it is well for the credit man to bear these factors in mind in determining the credit limit of the firm.

Is he reliable? This can usually be tested most effectively by an investigation of his **paying habits.** Punctual payment at maturity indicates a prime credit risk while irregularity in paying and a reputation of being involved in many disputes and arbitration cases are indications of doubtful credit risks.

Sources of Foreign Credit Information

CUSTOMERS' OWN BANK REFERENCES.—The first step is to collect reliable and up to date credit information. This the seller may obtain from various sources. Frequently the letter head of the customer shows one or more banks who are willing to give information about the customer. The local bank may have a great deal of information but it must always be remembered that in many countries abroad the bank does not play as important a rôle in the average business concern as it does in the United States. The bank, moreover, may know his domestic business relations and methods but may be wholly ignorant of the experience foreign firms have had with the importer.

A bank will always be careful in answering credit inquiries; on the one hand, a bank **cannot afford to give unfavorable information about its customers,** and on the other hand, a bank does not consider it good policy to give too detailed a report of good risks. Consequently, the information is often inadequate and noncommittal.

AMERICAN CONCERNS AS REFERENCES OF BUYERS.—The importer may refer to American business concerns. The danger of such references lies in the fact that an importer may deliberately build up a good reputation with a few outstanding firms and be far from honorable in his dealings with others. The references who will give excellent credit reports may be entirely unaware of the dealings of the importer with other firms. It would greatly contribute to the elimination of much of the foreign credit risk if exporters should make it a habit, upon completion of the transaction, to report back to the references their experience with the importer. In principle the business reference is of little value in itself because a creditor, asked for information about a firm which owes him a substantial sum, will not readily spread unfavorable reports about his customer even when his experience has not been entirely pleasant, since it would merely lessen his chances of collecting his own bills.

MERCANTILE AGENCIES.—The two well-known American credit agencies, **Dun's and Bradstreet's,** maintain foreign offices in the more important com-

mercial centers and have co-operative agreements with foreign credit agencies which enable them to obtain information about firms in almost any part of the civilized world.

A rate book such as is used in domestic credit does not exist for foreign business concerns. It is necessary to obtain **individual reports.** The charges for these reports vary with the work and expense involved in obtaining the required information. Usually the cost of each report is not more than $5, but it may amount to as much as $10. By subscribing to a large number of reports at one time the cost per report is greatly reduced.

The reports prepared by the credit agencies often represent the result of accumulated information gathered during many years. Both agencies have in their foreign department in New York City detailed reports covering hundreds of thousands of concerns in every quarter of the world and may often give an immediate answer to inquiries. On the other hand, the exporter need not be surprised if the credit agency cannot supply him immediately with the latest information concerning a foreign importer for it is obviously impossible to keep the information constantly up to date and to include all foreign firms which may at some time consider purchasing in the United States.

FOREIGN MERCANTILE AGENCIES.—The mercantile agency idea originated in England and was introduced on the continent before finding its way to the United States. Excellent agencies are found in most of the European countries. **Stubbs, Ltd.,** in London, **W. Schimmelpfeng,** in Germany, **La Société du Commerce,** in France and **Van der Graaf & Co.,** in Holland, are but a few of the long list of agencies all performing substantially the same functions as our American agencies.

The home office of the export firm will not find it practicable to employ the services of a foreign mercantile agency on account of the loss of time involved. But the salesmen or other foreign representatives of the exporter may obtain reports of the local agencies and attach them for the other information which they send in regarding new customers. Such reports are comparatively inexpensive and are quite as reliable as those gathered through the American agencies.

Most of the credit information available through these foreign agencies must be obtained by means of individual reports. Rating books are published in isolated instances and are inadequate and hardly ever up to date.

AMERICAN BANKS.—Many American banks maintain foreign departments. One of the most valuable assets of a commercial bank engaged in foreign trade is its credit file. This credit file the bank may have accumulated through information collected by its own branches abroad or through correspondent banks. The bank's own experience with these risks will also be a part of the credit file.

The exporter will consequently be able to obtain without delay credit information about many foreign buyers from his own bank. If the bank cannot answer the inquiry from its own file it will secure the required information from its foreign branch or from a correspondent in a foreign country.

The foreign bank will be much more willing to give information to another bank, where goodwill can always be translated into dollars, than to answer inquiries of unknown foreign business houses. This makes it wiser to apply to one's own bank for information.

CHAMBERS OF COMMERCE, AT HOME AND ABROAD.—Information concerning foreign buyers may also be obtained from many of the American chambers of commerce in foreign countries and from some of the foreign

chambers of commerce established in the United States. The credit information obtained from these sources is useful to check up information received through other channels.

As an example of the services maintained by American chambers of commerce abroad, may be quoted those of the Sao Paulo Chamber of Commerce:

"Comprehensive studies of the conditions in any particular trade including customs informations, $100.

The arranging for representatives in Brazil of United States firms, $10 to $50.

Credit reports taken from five responsible sources, $1, mailing lists, 10 cents per name, minimum $5.

Display of samples, 50 cents per square foot, minimum $10.

Catalogues. The keeping in a properly indexed file of trade catalogues for the free use of any local applicant, $10 per year."

FOREIGN TRADE ASSOCIATIONS IN THE UNITED STATES.—Even more valuable is the credit information that may be obtained through some of the foreign trade associations found in this country. Many national organizations exist, some of them limited to a narrowly restricted group of producers, and others of a more general scope, which are building more and more efficient credit report systems. The **National Association of Manufacturers** and the **American Manufacturers Export Association** may be mentioned among many. Such organizations may depend largely upon information gathered through foreign agents, upon the exchange of credit experience between their numbers, or they may combine these two sources of information.

THE NATIONAL ASSOCIATION OF CREDIT MEN.—This association established in 1919 a **Foreign Credit Interchange Bureau,** which acts as a clearing house for the interchange of ledger experience between its members. The bureau is financed by the fees of its members and is conducted as a non-profit making undertaking.

Each member sends to the bureau a list of the firms with whom he has done or is doing business. For each foreign customer a card is prepared, on which, by means of numbers, are indicated the exporters who have sold him goods in the past. When a request for information comes from a member concerning a foreign firm of whom a record is found in the file, the various exporters are circularized to obtain their latest experience with the credit risk. The replies are combined in a report sent to the inquirer and to the exporters who furnished the information, thereby enabling the latter to revise their own credit records. The information collected about a buyer from the various members covers the following points: how long sold, terms of sale, highest recent amount, date of last dealings, amount now owing, amount past due, number of days past due, manner of payment, rating, credit limit (if any), credit declined (with reason).

The bureau also publishes a bulletin which keeps the subscribers informed of general credit conditions throughout the world.

This organization makes special investigations and combines the result of this information with the ledger experience of many manufacturers. The clients are informed of any change in the financial standing of the customer. Bulletins are issued at stated intervals giving general economic and credit information about foreign countries and information is available concerning shipping, foreign tariffs, commercial laws and other matters of interest to exporters.

OTHER SOURCES OF CREDIT INFORMATION.—The **Philadelphia Commercial Museum,** the various export journals and many of the **American chambers of commerce abroad** and **foreign chambers of commerce in the**

United States are in a position to give credit information. Some of these channels of information may prove especially valuable since they may give access to data not available elsewhere. This is particularly true of organizations like the American Chamber of Commerce in Sao Paulo and the American Chamber of Commerce in Berlin which are making a special effort to gather reliable and up to date credit information.

These services are not, as a rule, gratuitous. The charges are, however, very small and represent only approximately actual cost. The mercantile agencies and the chambers of commerce may also aid the American exporter in finding reliable agents in the making of collections, and in supplying information concerning customs regulations and tariffs.

It is often necessary to gather credit information with the least possible delay and in such cases a knowledge of more than one source of information is especially desirable.

American consuls abroad, the commercial attaches or any other government representatives or government bureaus are not permitted to distribute credit information. It is equally useless to address foreign consuls for information about their home firms.

TRAVELING SALESMEN.—Traveling salesmen or local agents are not trained as credit men and it is often claimed that it is inadvisable to require them to gather credit information about their customers. But the personal contact which the export firm has with its customers through its salesmen and agents is too valuable an opportunity to gather credit facts to allow it to pass without being used.

The salesman who is called upon to give such facts when sending in his initial order and is required to report his observations concerning old customers, is forced to think of the credit aspect of his sales. He will in time become a keen observer of surface indications and will, moreover, be less likely to waste his efforts upon the securing of orders which his firm will subsequently refuse to fill.

The credit man in the home office must still obtain his information from other sources but the salesman's report may throw a new light upon the reports thus received and may aid the credit man in arriving at his final conclusion.

It is good policy for the credit man to see to it that the salesman is in possession of credit information concerning old and new customers and is informed of all cases where his judgment may have proven to be wrong either through the reports received from other sources or through the sad experience of dishonored drafts. The credit man may in this way train the direct representatives which the firm has in the foreign market to become more than mere order takers and may prevent annoyances and legal entanglements resulting from the refusal of the home office to execute orders sent in by the salesmen.

Foreign Credit Insurance

THE MORAL RISK.—Familiarity with domestic credit insurance will enable one to understand readily the difficulties connected with the insuring of foreign risks. The domestic insurance scheme was based upon the published ratings in rating books like Dun's. No such rating books exist for foreign credits and the limiting of insurance to selected risks becomes a difficult matter. In the absence of an external check the moral risk becomes extremely great for the temptation will be powerful for exporters to endeavor to insure only the bad risks and to incur no unnecessary expenses with the good risks. No in-

surance undertaking can be successfully carried on unless this moral risk is in some way limited. Two methods may be used to diminish the moral risk. The first is to build up a body of credit data comparable to the credit ratings of domestic firms and accept for insurance only the known risks with good credit history; while the second is to insure only a part of the amount involved in each transaction, thereby making it worth while for the exporter to exercise due care.

DEL CREDERE BANKING HOUSES.—Some of the German banks, known as del credere houses prior to the war, made it a practice to buy without recourse bills drawn by approved dealers upon known customers abroad. They also insured for a premium, a portion of the risk in other approved bills and "accepted invoices." The latter were invoices accepted as correct by the buyer.

GOVERNMENT CREDIT INSURANCE.—In Great Britain and some of the countries of the European continent, notably Holland, the governments have established credit insurance offices which will share foreign credit risks on approved transactions.

FOREIGN AND DOMESTIC CREDIT INSURANCE COMPANIES.—This fractional insurance has also been adopted by the Trade Indemnity Co., Ltd., recently organized in England. In the United States several ways of insuring foreign credits are open to the exporter. In the case of **staples** as high as 75% of the risk may be insured by a certificate, "For account of London Underwriters." The insurer is only liable in case of insolvency and will only accept risks on acceptable bills. The use is, therefore, quite restricted. Many of the regular insurance brokers are now in a position to write this insurance. Of more general application and more satisfactory as to coverage is the insurance contract which may be obtained through the **American Manufacturers Foreign Credit Insurance Exchange.** Without giving unqualified approval of the operation of this exchange a description is here given merely as another example of an attempt to provide the protection sought for.

THE AMERICAN MANUFACTURERS FOREIGN CREDIT INSURANCE EXCHANGE.—This exchange is a mutual company. The exporter in applying states his name, address, business, average yearly export sales, the usual terms of foreign sales and the annual basis on which he desires membership. He desires to seek protection against losses due to the insolvency of foreign customers and appoints the exchange attorney-in-fact as his agent to secure this protection.

Master Policy of the Credit Insurance Exchange.—He then receives a "master policy," which acknowledges him as a member of the exchange and entitled to obtain protection for each separate and approved risk on the conditions laid down by the exchange. The master policy also contains a statement to the effect that the other members agree to insure the new member in proportion to their participation and that a reciprocal obligation rests upon the new member.

Basis for Premiums.—The estimated sales form the basis for determining the **deposit premium** to be paid in addition to the premium charged on each specific risk. In return for these premiums the association gives 100% protection on each accepted risk.

Factors Determining Acceptance of Risks.—The factors which play a part in determining whether and to what amount the specific risks will be acceptable are:

1. The single account limit. The exchange has information concerning the various buyers and for each a **credit limit** has been set. This limit is arrived at after a study of the financial responsibility of the buyer, the type of merchandise, the normal turnover, the number of probable sources of supply and the number of known sources.

2. The insured must notify the exchange when payment has been made. He is encouraged to do so by the fact that premiums are charged monthly and cease only upon **notification of payment.** In this manner the exchange is informed of the extent of the credit granted by the known sources.

3. In each individual case the member will inquire for the **rate.** Upon approval of the risk the rate is quoted and the exporter must immediately send a "nomination of shipment" or run the risk of finding the rate changed later or of finding the credit line exhausted. The exchange then issues a certificate of insurance.

Factors Determining Rates of Premiums.—In determining the premium three factors are taken into consideration: the credit rating of the buyer, the terms of the sale, and the length of the credit.

The basic rates for "high," "good" and "fair" credit ratings are 1%, 1⅛%, and 1¼%, respectively. These are increased by ⅛ of 1% for each additional month when the credit period exceeds two months.

The rates apply to sight or time drafts of not more than 6 months.

The exchange has also published **two credit guides,** one for Latin America, the other for the Orient and Australia. They are kept up to date by supplementary sheets issued from time to time.

OBJECTIONS TO CREDIT INSURANCE ON FOREIGN ACCOUNTS.—Although protection may thus be obtained on most foreign risks the present methods of credit insurance are often open to the following objections:

The most **serious causes for credit losses,** such as rejection of goods, are not covered and actual insolvency against which the insurance protects is a comparatively rare occurrence.

While making sales it is impossible to know whether and at what rate insurance may be obtained.

The most successful underwriters have thus far been mutuals and to participate in them exposes the exporter to **assessments** and other expensive surprises in the future, and makes it of the utmost importance for him to become informed of the administrative details of the mutual. One point of importance to watch is how much of the premiums paid in is actually used to create an insurance reserve fund or to secure reinsurance and how much is absorbed in the administrative expenses and the salaries of the mutual.

DEL CREDERE AGENTS AS A PROTECTION OF CREDIT RISK.—The exporter may find another way to protect himself against the credit risk. Many agents in foreign markets are what are called **"del credere" agents.** This means that the agent guarantees to his principal that drafts drawn on his customers will be duly honored. Obviously such a guarantee means little unless the agent's financial capacity is sufficient to meet the contingent obligations which he thus assumes. The principal objection to this method is the expense, for the "del credere" agent will demand a fairly large del credere commission for this service.

Foreign Credit Policy

FACTORS IN DETERMINING CREDIT POLICY.—The exporter will find that it is much more difficult to live up to inflexible rules in foreign trade

than in domestic trade. This is especially true of the terms of credit. He will do best to adopt **a definite credit policy** always with the understanding that more favorable terms may be made upon satisfactory evidence that the importer is entitled to such special treatment. This places the burden of proof upon the buyer. A definite policy has the additional advantage of concentrating the sales activities on buyers willing to meet these terms. There will then be less friction between the credit man and the sales force.

Nature of Trade.—In general it must be remembered that the retailers abroad depend much more upon their own capital and upon trade credit than do the retailers in the United States to whom the commercial banks readily extend credit facilities.

The importing house abroad is under the necessity of carrying his retailers. In turn he, therefore, depends upon the credit obtained from the exporters of other countries to carry him. The importer will be forced to carry relatively large stocks of the goods which he undertakes to distribute, for any replenishing of stock may be subject to delays of manufacturing and of transportation.

These are only some of the factors which will often cause the salesman to urge his firm to grant liberal credits. He will find his selling greatly influenced by the credit terms granted by other foreign firms, who may know the market better because of their longer experience and who are for that reason able to extend rather liberal terms.

Character of Goods and Economic Development.—The next considerations in determining the credit policy in any one market are the character of the goods and the economic development of the market. Generally speaking, **fluctuating staple commodities** should not be sold to new customers except on cash/document port of exportation. Goods subject to a **slow turnover** will usually demand a longer credit period. If the goods are **seasonal,** this fact must be borne in mind, for in no case should the credit extend beyond the end of the selling season, since such an extension would not increase the ability of the customer to liquidate his goods and is, therefore, dangerous.

Character of the Country.—Similarly it is necessary to take into consideration the character of the country. Buyers in an **agricultural country** may usually be granted longer credit terms than those in a highly industrial country. The reason for this is obvious, for the amount of capital available is usually smaller and the moving of the goods is to a large degree tied up with the movement of the crops.

Credit Period Governed by Period of Turnover.—The one principle which should always be foremost in the credit man's mind is that the only sound credit is a credit which allows the customer the time to turn his goods into cash with which to pay his bill. A longer period of credit is dangerous because the funds may have been reinvested by the time that the due date arrives, but a much shorter period may under certain circumstances be equally dangerous, since the due date may find the customer unable to meet his obligations.

Credit Terms in Relation to Margin of Profit.—The margin of profit which the dealer may be expected to make on the goods is another important consideration. The larger this margin the less of the goods he needs to sell to earn enough to pay the draft when due. The **"mark-up,"** from the point of view of the credit man, is as important as the rapidity of turnover.

Credit Terms in Relation to Capital Strength and Turnover.—Easy credit is always an invitation to over-buying. The extent of the credit in each individual case should bear a relation to the capital strength of the buyer to

the rate of turnover of the goods in his establishment, and to his reputation as a credit risk.

RISK OF LONG CREDIT TERMS IN FOREIGN TRADE.—A non-competitive product will allow the exporter to make his own terms, but few products are of that type. On the other hand, long credits granted without careful analysis of all the factors involved will prove more disastrous than they would in domestic trade because of the difficulty of making proper adjustments at a long distance.

LIBERAL CREDIT TERMS OF EUROPEAN CONCERNS.—The rather liberal credit terms which European houses are reported to have been in the habit of granting in South America and other foreign markets were usually granted, not by the manufacturers, but by **commission houses and export houses,** who, because of their local representation, were in a position to know their risks. Much of the credit granting by German houses prior to the war was unwise and the mistake is not likely to be repeated in the future.

CREDIT TERMS "CASH NEW YORK."—Terms, "Cash New York," will naturally not be an aid to selling a highly competitive article in a highly competitive market but will not by any means strike the foreign buyer always as unfair or unreasonable. Through the **letter of credit** he will be able to secure the aid of his bank in meeting these terms and no particular hardship is put upon him. If his credit is not good enough with his own bank to secure its co-operation then he surely cannot expect a foreign exporter as a matter of course to grant him a liberal credit.

On the other hand, cases will often arise when a firm little known to the exporter but of long standing in its own locality, will greatly resent such cash terms. The firm may regard it as a reflection on its reputation and may resent an American firm taking an uncompromising attitude when European firms have always been willing to grant long credit without question.

CREDIT MAN'S DUTIES AND FUNCTIONS IN FOREIGN CREDITS.—The credit man should study his markets and the customs prevailing, as well as the general economic and credit conditions in the country where the customer resides, and should decide each individual case upon its own merit. A credit department may be merely a brake upon business, a restraining hand upon the enthusiastic sales representatives abroad, but the success of the concern in foreign markets will be greater if the credit department will bend its efforts to training the sales force in credit judgment and in selling only where sales will be most profitable.

DANGER SIGNALS IN FOREIGN CREDITS.—The credit man must constantly be on the lookout for danger signals. **Crop failures** may change the credit conditions in a given country over night, a disaster like the Japanese earthquake will call for careful action and may make it necessary to hold up the shipments already made until more information can be obtained; a bank failure or the possibility of bankruptcy of a large commercial concern may deeply affect the financial ability of a customer. Other factors that need to be watched are **changes in the tariff** or **changes in the exchange rates.** The importer pays the import duty, and the exchange rates affect him directly when the draft is drawn in dollars, so that his willingness to live up to his contract may be greatly affected by such events.

PROTECTION AGAINST NON-ACCEPTANCE OF GOODS.—It is not difficult to find excuses and plausible reasons for non-acceptance of goods.

Some exporters demand that the buyer, when placing his order on the basis of a dollar quotation, submit a statement from his bank to show that he has covered himself by a **future purchase of exchange** against the exchange fluctuation risk. This is a sound credit policy, but even so, it does not protect against disastrous price competition when a sudden drop in the dollar exchange enables the importer's competitors to buy more cheaply in which case the exporter will still face the risk of refused goods.

CO-OPERATION OF CREDIT AND SALES DEPARTMENTS.—The credit man must, therefore, do more than merely pass on credits. He must secure the co-operation of the sales department to eliminate waste effort in the sales force through selling to undesirable risks, and he must watch for danger signals so that action may be taken when needed to protect the interests of the firm.

Collecting Past-Due Foreign Accounts

It is not possible to state in detail what action a firm should take in every case when a draft is not honored when due. The action which the firm should take depends not only upon the laws and customs of the foreign country but also upon the individual relations existing between buyer and seller.

PROTESTING DRAFTS.—Many exporters make it a rule not to protest a draft unless new evidence has been received at the office indicating a decided change in the credit and moral standing of the buyer. To **protest a bill for non-acceptance** is usually unwise for it does little good and makes enemies.

In the case of **non-payment** the matter is somewhat different. Not to protest for non-payment may mean that the drawer sacrifices an important advantage for in most countries the holder of such a protested draft has little trouble in proving his claim while a non-protested draft has practically no standing in the courts.

In case the buyer becomes insolvent and goes into bankruptcy the rights of a holder of a protested draft are fully protected and he is placed in a preferred position. There must, therefore, be good cause for instructing the collecting bank not to protest upon non-payment. A valid excuse for non-protest would be because some circumstance has arisen which makes it unwise on the part of the exporter to press his claim. On the other hand, it may be said that no honorable firm would allow a draft to be presented knowing that payment will not be made, without making some effort to come to an agreement with the drawer prior to maturity. Where the exporter is duly informed and the reasons are good and sufficient he will do well to waive protest and to grant the needed extension.

Where no attempt has been made to come to an agreement protest may be the best thing especially in the case of accepted drafts. After all, to protest a draft means merely to obtain legally accepted evidence of non-payment and in no way puts the exporter under obligations to press his claims further. But the exporter must remember that his customer may resent having the draft protested, may have a good reason for refusal and that the costs of protest are sometimes considerable.

A good practice to follow is to protest only in those countries where valuable rights would be sacrificed by non-protest, and to protest in other countries only after the bank has notified the exporter of the circumstances and conditions. As a rule **legal action** should be avoided. It is difficult and expensive in the United States, and becomes even more so when the customer is located at a great distance and is subject to different laws from those of the United States.

The expense is increased by the requirement found in many countries that the creditor deposit a sum sufficient to cover all necessary costs before the court will take any action in the matter.

COMMERCIAL ARBITRATION.—In recent years much progress has been made in commercial arbitration. Many American chambers of commerce abroad and foreign chambers of commerce in the United States have established **arbitration committees or courts.** The most significant step in this direction was taken by the **International Chamber of Commerce.** This international body, created in 1920, with headquarters in Paris is represented in the United States by the Chamber of Commerce of the United States which is a member of the International Chamber.

When a question is submitted to arbitration little time is consumed in arriving at a conclusion, legal hair splitting is avoided, and the issues involved are approached by the business men who act as arbitrators in a friendly conciliatory spirit. But arbitration can only be used when both parties are willing to submit to it. When the debtor refuses to submit the only recourse is in the courts. It does not usually pay to press small claims unless the exporter has a resident agent in which case the matter may be referred to him giving him full power to act.

FOREIGN COLLECTING ATTORNEYS AND AGENCIES.—Large claims on debtors in places where the exporters do not have personal representation may be collected through foreign attorneys or collecting agencies or they may be placed in the hands of American attorneys or agencies who have correspondents abroad. Many foreign credit information agencies undertake the collecting of overdue accounts. In every case it is well to have a clear understanding as to the charges, both in case of success and failure.

If the matter is placed in the hands of an agency or attorney it will be necessary to provide them with a **proof of claim** and it will usually expedite matters if the claim is assigned to them. All documents referring to the transaction, letters, catalogues, cables, and the debtor's order and proof of shipment must all be provided and attested by affidavits which will make them acceptable as proof in the foreign court. The creditor's statements must usually be under oath before a notary public and it may be necessary to have the notary's signature verified by the foreign consul or by the county clerk or secretary of state of which the creditor is a resident.

As a rule the **charges of foreign lawyers** are not as high as those of American lawyers, at least if they are properly approached. There is a decided tendency among foreign lawyers to charge much more liberally when dealing with American firms than when called upon to represent firms of other nationalities.

LEGAL ACTION SHOULD BE AVOIDED IN SOUTH AMERICA.—In South American countries litigation is especially to be avoided for delays and costs are particularly large and since in many South American countries protest may be made as late as 5 years after the due date of the draft it is better to try every possible means of friendly settlement before resorting to legal action. Legal action should always be the last thing and should never be taken until the exporter has decided that he never cares to sell again to the customer involved.

Ocean Freight Rates

HOW QUOTED.—There is **little uniformity** in the method of quoting freight rates by ocean carriers. Many lines are still quoting in terms of the

cargo ton (2,240 lb.,) metric ton (2,204.62 lb.) or measured ton (40 cu. ft.) There are many lines now quoting special commodity rates based upon 100 lb. or cubic feet, cubic meters, M. feet and other weight or quantity units. Some lines publish "rate cards" or "tariffs" after the fashion of the railroads but this is the exception. Rates change in ready response to shipping conditions and different steamship lines will quote different rates.

"Ship's option" in the quotation refers to the privilege reserved by the carriers to calculate the freight per 2,240 lb. or per ton of 40 cu. ft. Goods weighing more than 56 lb. to the cubic foot are charged on the basis of the weight ton, all other freight, and that is the majority of the ocean freight, pays on the basis of the measurement ton.

PACKAGE NOT TO EXCEED 2 TONS IN WEIGHT.—It is always understood that the rates quoted apply to packages not exceeding **2 tons in weight.** Packages of greater weight need **special hoisting equipment** to be placed on board and the shipper must either make arrangement with a hoisting company to place the goods on board or pay the extra charges of the steamship company.

MINIMUM CHARGES.—Ocean bills of lading usually contain a clause that the shipper must agree to pay at least a minimum charge. This is called **"minimum bill of lading."** The shipment of small packages for that reason becomes expensive under a regular bill of lading.

PARCEL RECEIPTS.—Many steamship companies now issue **parcel receipts** for parcels of small size and weight for which only a small charge is made. Another method of avoiding excessive freight charges on account of the minimum bill of lading is to combine several parcels into one shipment. The shipment may then be broken up by the shipper's representative abroad. The freight forwarder performs this service among others to be discussed later.

BERTH CARGO RATES.—The rates charged on commodities like coal, grain or case oil shipped in large quantities are subject to severe competition of the tramp steamers placed "on berth" by ship brokers and are, therefore, in closer agreement with the open freight market than the general cargo rates above mentioned. Such bulk goods are often carried as paying ballast at very low rates by regular line steamers.

CHARTERS.—Where goods are shipped in sufficiently large quantity to warrant engaging an entire vessel, a vessel is chartered through a ship broker. The contract between ship owners and shipper is called **"charter party."**

Two types of charter parties exist: the trip and the time charter. Under the **trip charter** the owner operates the vessel and the shipper pays a given sum per ton cargo, per bushel or per hundred pounds. This charter specifies the ports of departure and of destination with a certain latitude as for example "North Atlantic range," meaning all ports in the North Atlantic, and contains a demurrage clause stating the penalty to be paid by the shipper for undue delay in loading or receiving the freight.

The **time charter** usually transfers the operating expense to the shipper, though operation of the vessel is left under control of the owner. In this case the shipper usually pays an agreed rate per dead weight ton or per net registered ton.

The **charter rates** are a matter of open market bargaining and are published in the shipping and financial journals.

INQUIRY MUST BE DEFINITE.—In requesting information regarding freight rates it is necessary to be definite. The inquiry must state: kind of goods, value, number of packages, weights and measurements of each, and date of shipment. Once the quotation has been received it should be acted upon immediately and the necessary freight space reserved.

Shipping Procedure

SHIPPING PERMIT AND DOCK RECEIPT.—A "shipping permit" is delivered by the carrier. Without it the clerk at the dock will not receive the goods for shipment. The goods are sent to the dock at the time indicated in the permit and the shipping permit is exchanged for a dock receipt in which the company acknowledges receipt of the goods.

DOCK RECEIPT EXCHANGED FOR BILL OF LADING.—The dock receipt must be exchanged for a signed bill of lading. The carrier will usually demand **prepayment of freight charges.** It is possible to arrange for payment at delivery but this is not normal. Foreign buyers should be informed that in all cases where the quoted price does not include freight charges, the buyer must be prepared to pay freight in the United States unless he can make other arrangements with the carrier.

EXPORT DECLARATION.—The exporter must also produce an "export declaration" which is required by the United States customs. The steamship company must not issue bills of lading until a properly certified export declaration is presented.

PACKING IN RELATION TO FREIGHT RATES.—Export packing must answer different requirements from packing for domestic transportation. **Climatic changes and methods of handling freight** differ in various parts of the world. Shipping by steamer, especially where transshipment takes place puts usually a greater demand upon the strength of the packing. An ocean trip exposes the goods to dampness which may make it necessary to protect metal parts more carefully than when shipped inland. Ocean freight is more exposed to pilfering and to breakage than is domestic freight.

Packing may be efficient and yet not excessively heavy; it may be heavy and yet not strong. Scientifically constructed boxes and containers can now be procured as a result of the valuable experience gathered during the War. Organizations like the **American Freight Container Bureau** are prepared to give information to shippers as to the best way of packing their goods.

Certain fundamentals are to be kept in mind. Very large and very heavy cases may mean extra expense in loading and unloading, may mean greater risk of damage, since large and heavy cases cannot always be handled carefully.

Since space is paid for, it is economical to pack as much into that space as is possible. **Protection against pilfering** not only prevents stealing but may lead to better insurance and freight rates. Poor packing will result in dissatisfied customers and in expenses on account of claims. It is usually good business to obtain and follow instructions concerning packing from the purchasers.

MARKING OF CASES FOR SHIPMENT.—Each container should bear, if possible, on all sides the marks by which it may be identified. These marks should **correspond accurately** with those appearing upon the commercial and consular invoices, the bill of lading, and the other documents relating to the shipment. Loss in time and money will result from discrepancies.

The markings should be put on **with stencils** so that all marks will be identical and if more than one box makes up the shipment they should bear serial

numbers for quick identification. This will make it easier to trace boxes in case of delay or loss. When consecutive shipments are made to the same firm, it is well to use consecutive numbering from one shipment to the next. It will then be possible to identify the cases of each shipment after they have been placed in warehouse.

The customs regulations in many countries make the use of stencils obligatory, and require that the **gross and net weights** appear on the outside and also the name of the consignee and the port of destination.

PACKING LIST.—Another method of protection against loss is to include in each box a packing list with markings. This slip would make identification possible even after outside markings are destroyed.

MARINE INSURANCE—RISKS TO BE COVERED.—Under the ocean bill of lading the **carrier assumes responsibility only for the seaworthiness of the ship,** both as regards its physical condition and the qualification and number of crew, but he cannot usually be held liable for damage resulting from faults or errors in navigation, or in the management of the vessel, and the ocean bill of lading contains a long list of further exceptions which leaves but few situations in which the carrier can be held liable for damage or loss.

The shipper must therefore seek protection by insurance. The ordinary insurance policy does not insure against all possible risks. The **risks covered** are: the perils of the sea, pirates, thieves, jettison, barratry and other like perils. If protection is desired against pilfering, breakage, and other like perils a special premium must be paid. Although there is practically no risk against which it is impossible to insure, the expense is often prohibitive.

The subject of marine insurance is comprehensively covered in the Section on Insurance Protection.

The Bill of Lading in Foreign Trade[1]

NATURE OF DOCUMENT.—The ocean bill of lading is a receipt and a contract. It is a **receipt** for the goods delivered by the shipper to the carrier and a **contract** by which the carrier is bound to carry the goods from one port to another and to make delivery at the port of destination to the person legally entitled to the goods. The B/L therefore is also a certificate of ownership and as such is negotiable if drawn to the shipper's order or to a named consignee.

The form of bill of lading differs in the various countries and frequently each trade has its own form. The **legal responsibilities** of the carrier are determined by the clauses of the bill of lading and by the commercial codes or special laws dealing with the bill of lading found in most countries today. The multiplicity of forms and of laws under which these forms are to be interpreted do not contribute to make the position and the rights of the shipper clear and certain.

A number of attempts have been made of recent years to bring order out of the chaos. The meeting in The Hague in 1921 of the International Law Association brought out a recommendation under the name, Hague Rules 1921. These rules have been adopted by a large number of carriers and form the basis for the contractual relation between shipper and carrier in an increasing number of cases. The Bill of Lading convention of Brussels in 1922 was another step in the direction of greater uniformity.

TYPES OF BILLS OF LADING.—The bill of lading prepared to be used as collateral for a loan with a bank is made out to the order of the shipper and

[1] For bill of lading in domestic trade, see Section 20 on Traffic Management.

endorsed by him to the bank or in blank. This is called an **"order bill of lading."** A bill of lading made out to the consignee is called a **"straight bill of lading."** If the name of the importer is mentioned as the consignee no one but he or his order can obtain possession of the goods. Such bills of lading do not make acceptable collateral with the banks.

Some countries, notably in South America, do not permit the use of order bills of lading. In other countries the importer may obtain possession of the goods even without presenting a B/L if he can prove that he is the consignee. In such cases the exporter can protect himself only by demanding payment prior to shipment or by consigning the goods to a bank with instructions to turn the goods over to the purchaser only upon payment of the draft.

THE "NOTIFY CLAUSE" IN BILLS OF LADING.—The "notify clause" often appears in the margin of order bills of lading. The shipper thereby does not in any way relinquish his rights with respect to the goods but merely requests the steamship company to inform the purchaser of the arrival of the vessel. In some countries the "notify clause" must appear on all B/L drawn to order.

"FOUL" AND "CLEAN" BILLS OF LADING.—The carrier is responsible for damage to the goods other than that stated in the conditions of the bill of lading. If any packages are delivered to the carrier in damaged condition or insufficiently packed for the ocean voyage, the carrier to protect himself will make a notation in the margin of the B/L. This "foul" bill will **not make good collateral** with the banks. They demand "clean" bills, for claims are almost certain to result from a shipment made under a "foul" bill.

LETTER OF INDEMNITY.—The shipper may not always be aware of defects until after the goods are in the hands of the carrier. He may nevertheless be able to secure a clean bill of lading by preparing a "letter of indemnity" in which the shipper undertakes to hold the carrier free from claims on account of or resulting from the damage ascertained at the time of shipping. A better method is to instruct the receiving clerk of the carrier not to accept the goods if he is not prepared to issue a clean bill of lading against them.

NUMBER OF COPIES OF BILLS OF LADING.—The bill of lading is usually prepared by the shipper on forms obtained from the carrier. **Usually three copies** are signed by the carrier. These constitute the **"negotiable copies."** The number of negotiable bills issued is stated in each negotiable copy. The banker will insist upon a **"full set"** being delivered to him for any one negotiable copy is sufficient to obtain possession of the goods.

Additional "non-negotiable" bills of lading may be issued. These may be required for various purposes. One copy may be sent to the purchaser to notify him that shipment has actually taken place, another may be kept by the shipper for his file, while another copy may be required by the foreign consul for his record.

TERMS "ON BOARD" AND "FOR SHIPMENT"—DISTINGUISHED.—In some countries, notably on the European continent, the ordinary bill of lading stating that goods have been received for shipment, is not accepted for negotiation in the absence of special instruction. In this country much controversy and little agreement exists among banks, merchants, carriers and even among the courts with respect to the value of the **"received for shipment" bill.** The steamship lines belonging to the Transatlantic Freight Conference have agreed to stamp a dated endorsement on the bills of lading indicating that the goods have not only been received for shipment but have been actually placed on board a given vessel. With this **"placed on board" or "shipped" clause the bill of lading** undoubtedly gains in value as collateral for the actual

fate of the goods is not left in doubt and the approximate date of arrival may be computed. There is, however, no agreement on this point, and in normal times when freight space is readily available, there is not much difference between the two kinds of bills of lading.

The seller may prefer the "received for shipment" bill for this is issued without delay upon receipt of the goods by the carrier and may be presented at once to the negotiating bank. The buyers, on the other hand, often insist on some unmistakable proof that the goods are actually placed on board and are on their way before allowing their bank to make any payments. They are supported in this by some laws and by not a few decisions in the American and English courts.

THE THROUGH BILL OF LADING.—When shipped from interior points the goods may be consigned to a representative in the port of exportation. The ocean bill of lading secured by him is then placed in the hands of the negotiating bank. The railroads issue "through bills of lading" from interior points to foreign ports.

Difficulties have sometimes arisen from the use of through bills of lading because of the uncertainty which necessarily adheres to this method with respect to the particular steamship by which the goods will be dispatched. Banks on the eastern seaboard generally refuse to accept them in the absence of special instructions, but through bills of lading are quite generally used for shipment to the orient.

The **freight forwarder,** if he is entrusted with a shipment from an interior point, also issues a bill of lading or way bill. This document does not enjoy favor with the banks and is not usually accepted as collateral.

TRANSSHIPMENT BILLS OF LADING.—It may often be unavoidable and sometimes desirable to send goods not by direct but by indirect route necessitating transfer to another vessel at some intermediate point. Often quicker and more frequent service is available by indirect than by direct route. Although an element of uncertainty is thereby introduced on account of possible delay and damage in transshipment, the transshipment bill of lading is usually acceptable to the bank unless the purchaser has insisted upon a direct route.

CERTIFICATION OF BILLS OF LADING.—Many countries require that negotiable copies of the ocean bill of lading be certified by a consular officer of the country. The following is a list of these countries: Argentina, Bolivia, Chile, Cuba, Guatemala, Haiti, Panama, Paraguay, Salvador and Uruguay. The charge for this service varies from 75 cents in the case of Chile to $3 in the case of Panama. It is important to secure this certification for without it no delivery will be made by the carrier.

Price Quotations

DOMESTIC AND FOREIGN PRICES.—The exporter selling in foreign markets may follow a different price policy abroad from that which has been established in the domestic market without affecting the domestic sales. A nationally advertised consumers' **article sold at a standard price** in the United States will usually be sold abroad at the same price. A lower price abroad might reflect on the home market. When competition is extremely keen abroad the standard price may have to be abandoned, but in this case it is desirable to make some slight yet noticeable change in the composition or make-up of the article so that domestic users may at once recognize it when traveling abroad as an article prepared especially for the foreign market and

that any attempt at reimportation of the cheaper article for sale in the United States may easily be detected.

In **selling abroad at a lower price** than in the domestic market some difficulty may be encountered with foreign tariff regulations especially in those countries where anti-dumping certificates are required.

HOW QUOTED.—In quoting prices the seller may quote the price at the factory or he may quote a price at which he is willing to carry the goods to any given point on the route between his warehouses and those of the foreign purchaser. In each of these various quotations the following factors must be mutually understood:

1. **What the exporter undertakes to pay** and what charges must be met by the importer.
2. **Where delivery takes place,** or in other words where the responsibility lies with respect to loss or damage for the exporter; for the place of delivery is the place of inspection. Acceptance, however, does not bar action for damages.

In the section on Purchase and Sales Terms is set forth the meaning together with the obligation of the buyers and sellers under the various trade laws used in foreign and domestic business.

In Europe **"free go down"** or **"free delivered"** (named interior point) is often found. This is not commonly used in the United States. Any payment of duties and other charges is covered specifically in this country, by clauses in the contract of sale. In making quotations it is well to state the exact meaning of the quotation or to make mention of the fact that the American foreign trade definitions are taken as a standard.

F. O. B. Quotation.—The simplest quotation for the exporter is f. o. b. quotation. As far as his prices are concerned he has not introduced any new element and the transaction is little different from a domestic transaction. This quotation throws the calculation of **freight and insurance charges on the buyer.** Purchasers may not be sufficiently familiar with foreign trade practice to enable them to obtain the needed information readily, nor will they always be willing to undertake the burden of attending to all the formalities incident to shipping and insuring the goods. Therefore, the quotation while simple enough usually is not good practice.

C. I. F. Quotation.—The c. i. f. quotation which gives the purchaser a price for which the goods are laid down in the port of destination will be more acceptable not only because the exporter thereby undertakes to act as the buyer's agent in arranging for the freight and insurance but also because all fluctuations in the freight and insurance rates are shouldered by the seller. From the point of view of the seller the c. i. f. quotation is not so desirable because cost of insurance and freight may change suddenly and unless prices are revised frequently the prices may cease to be competitive.

The price must be determined not only upon the basis of cost and competition but with due regard to the channels of distribution which will be used. If the introductory sales are made to retailers the price must be set sufficiently high so that later sales to jobbers and wholesalers may be made with a sufficiently attractive margin. The most satisfactory method is usually to establish a list price and to notify the agents or salesmen periodically of the proper discount to be allowed to adjust prices to changes in the market.

Where c. i. f. prices are quoted, a complication arises for three elements of cost must be taken into account, **cost of goods, insurance** and **freight.** Cost of goods is the same for all markets but the other items differ with the distance

and with the seasons. One discount will therefore not fit all markets. Each market, each port in fact, must be given its own rate in order to translate list price into actual sales price. It may prove better to leave it to the local representatives to add insurance and freight but they are not in a position to know accurately what these charges would be and must be kept informed by the home office if miscalculations are to be avoided.

QUOTATIONS TO FOREIGN REPRESENTATIVES.—Some firms quote a price to their representatives abroad and allow them to sell at any price they can get. The agent may then be paid the whole of the difference or a part of the difference plus a commission. This price policy is only suited to highly competitive articles and especially to those which are not trade-marked and nationally advertised. For all other articles the resulting **lack of uniformity in prices** is certain to cause trouble. A dealer who discovers that a competitor or a merchant in another country or city is selling the goods at a price which would mean a loss to him grows suspicious of the firm from whom he has purchased the goods.

QUOTATIONS ON LONG-TERM CREDIT ACCOUNTS.—Where credit is granted, the prices must be increased to compensate for interest loss and credit risk. In quoting prices it will usually prove best to quote the long-term price as the basis and to allow reductions if payment is made within that period. It is easier and will create less friction to reduce a price once announced than to increase a price when it is discovered that long credit is required. Frequent fluctuations in price must be avoided for the same reason and it will prove good policy once the season's buying has started, to guarantee that prices will be maintained throughout the season.

QUOTATIONS IN DOLLARS OR IN FOREIGN CURRENCY.—By quoting in dollars the exporter escapes the risk of losing on account of **fluctuation of foreign exchange rates.** He knows what the transaction will yield him whether the terms read cash against documents New York or whether payment is made in a foreign country against a draft "payable in legal currency at the bank's drawing rate on the day of payment for sight drafts on New York."

The fact that under such a quotation the purchaser faces the foreign exchange risk has its disadvantages. It makes it more difficult for the buyer to calculate prices and the credit risk is greatly increased. Every unfavorable change in the rate of exchange presents a temptation to squirm out of the contract. It is often possible to throw the foreign currency risk upon the bank by a purchase or a sale of future foreign exchange but the exporter is usually in a better position to make such arrangements than the importer.

The exporter will find that quotations in foreign currencies will increase his sales, will allow greater choice of methods of payment, will improve his credit risk, and may be made practically free from risk of exchange.

The Sales Contract

CARE IN DRAWING CONTRACT.—After the quality and make-up of the goods and the credit and price policies to be followed have been established the merchant may solicit orders. In soliciting and accepting orders it is extremely important that no loop hole be left for misunderstanding and consequent disputes. In domestic trade the customs prevailing in a given trade are known or may be supposed to be known. In foreign markets different customs prevail and in perfect good faith a contract may be entered into by buyer and seller which afterwards proves to have been based upon different interpretations of

terms. Such possibilities may be guarded against by adopting a very detailed and comprehensive printed form for the submitting of special and general quotations.

ITEMS TO BE STATED ON SALES OR QUOTATION FORM.—The items which should be stated clearly in such form would naturally differ somewhat for each line of goods but will usually need to include the following:

1. **A description of the goods.** A reference to a published catalogue with indications of numbers, or a reference to samples submitted, or both, may take the place of a long detailed description but cannot usually make definite specifications unnecessary.

2. **The method of packing.** A detailed description of the method followed, the size of the cases and their weight and dimensions when ready for export.

3. **Who is to pay for the packing.** If any part of the packing must be paid for by the buyer the cost in actual figures or in percentages of the total invoice should be stated. If several optional methods of packing exist care should be exercised to indicate which method is recommended for the particular country or customer.

4. **The approximate time** required to fill orders of different sizes after receipt of the order.

5. **The price at which the goods will be sold, and the basis for this quotation;** whether f. o. b. steamship, c. i. f., f. a. s., c. i. f. i. & c., or some other quotation.

6. **What liability** with respect to quality, damage or breakage is assumed by the seller.

7. **What obligations** rest upon the buyer with respect to inspection of goods, making claims for shortage or defects, etc.

8. **Exemption of the manufacturer from liability** for delivery in case of strikes, or other causes beyond his control.

9. **What route** of shipping will be followed, and if possible what steamship company will carry the goods.

10. **What form of marine insurance** will be used unless otherwise instructed by the buyer.

11. **The terms of payment** that will be allowed should be explained definitely and if options exist these should also be clearly stated as separate and distinct possibilities.

12. **What will constitute acceptance of the offer,** and whether after acceptance either buyer or seller may modify the agreement as to quality or quantity or time of delivery. If so, then the last date after which no changes may be made must be stated.

13. If **sales samples** are usually supplied the conditions under which samples will be sent must be clearly stated.

14. The same holds true with respect to advertising matter and other dealers' aid devices. There should not be left any doubt regarding the question as to **who is to pay for** the shipping and for the import duties and other incidental charges on such **advertising matter.**

15. Special mention should be made of the **payment of consular fees** and other expenses.

16. The manufacturer should state definitely **until what future date the quotation will hold,** making due allowance for the time required to place a reply in his hands.

17. If the manufacturer can guarantee that for a certain time in the future he **can maintain the prices quoted** this will encourage foreign merchants to place their orders.

18. The prospective buyer must be informed that the seller is prepared to

execute to the letter any **special instructions** regarding packing, steamship routes, and the preparation of consular invoices and that the seller can only be held responsible for the faithful following of these instructions and not for damage, delay or fines resulting from them.

19. It should be stated that no contract exists until orders based upon this offer have been formally accepted by the seller.

ACCEPTING THE ORDER.—On the basis of the offer the order will be placed. In foreign countries it is customary to **sign and return a copy** of the order. Signed by both parties it thus becomes a contract the conditions of which will be determined by the formal offer to which reference is made in the contract.

The order should be carefully examined and any doubtful points should be cleared up before it is accepted. Once it is accepted, the seller is bound by a contract and exact compliance with every, even the minutest, detail in the order becomes a part of the manufacturer's obligation.

If **any modification** seems advisable to the manufacturer, on account of changes in style or quality, no substitution should be made until first the buyer has been consulted and has given his consent. In acknowledging and accepting the order every detail of the order should be repeated.

DELAYED SHIPMENT.—If any delay has occurred in shipping, it is safer to communicate with the buyer and to secure his consent to a delayed shipment than to assume that he will accept the goods upon arrival. By assuming nothing and by making certain at every stage of the contractual relation the possibility of cancellation and refusal of goods will be much lessened.

GUARANTIES ON SPECIAL ORDERS.—In cases where the goods must be specially manufactured for the foreign buyer and require a considerable outlay some time in advance of shipment, the manufacturer may insist upon special guarantees. It may be that he will demand that an **irrevocable credit** be established before he will begin to manufacture or he may follow the custom often found in European countries of demanding a bank guarantee that the order will not be cancelled and that the buyer will live up to his part of the contract.

Foreign Tariffs

CUSTOMS DUTIES INCLUDED IN QUOTATIONS.—It is not customary among American exporters to quote prices "franco domicile," "free go down," or "free warehouse." Such quotations include all charges including customs duties, until the goods are placed in the purchaser's warehouses, European houses sometimes make such quotations in dealing with Indian or Oriental purchasers and frequently sell under those conditions on the continent of Europe. Where such quotations are made a thorough knowledge of the foreign tariff is required.

But even in those cases where foreign duties are not included in the quotation a knowledge of foreign tariffs and custom procedure is desirable. Unimportant changes in the makeup of the goods or in their packing may influence greatly the duties to be paid by the foreign customer.

AD-VALOREM AND SPECIFIC DUTIES.—Two kinds of duties are found; those based upon the value of the goods—**ad-valorem duties;** and those based upon the quantity of the goods—**specific duties.** In the latter case the basis may be gross weight or net weight. The net weight may be actual or real net weight, or may be arrived at by deducting a given percentage—the legal tare

from the gross weight. When gross weight or legal net weight are used, a packing box, heavier than necessary, may increase the amount of the duty.

CLASSIFICATION OF GOODS.—Not infrequently the classification of goods under a tariff is influenced not only by the character of the goods but by the way in which they are finished. A slight change in the general appearance may often result in a more favorable classification. Care should also be used in naming and describing the goods. Pumps classified as agricultural machinery may be subject to a lower rate than the same goods classified as building or mining equipment.

PACKING AND MARKING REQUIREMENTS.—Customs regulations may require a certain method of packing or may demand that the marking be done by stencil. It may be that the name or initials of the consignee and the net and gross weight must be indicated in the system of weights and measures of the country of importation.

For this reason it is always desirable to obtain detailed instructions from the importer regarding such requirements in order that the goods may receive the most favorable treatment and that delay and penalties may be avoided. Whenever the exporter receives instructions regarding packing, marking or other technical details he should follow them to the letter no matter how trivial the requirements may appear to him. A failure to follow instructions gives the buyer a welcome excuse to refuse the goods and may result in unexpected outlays for the exporter.

SIMPLIFICATION OF CUSTOMS FORMALITIES.—No uniformity exists with respect to customs requirements in the various countries. The most recent attempt to bring about greater uniformity was **The International Convention Relating to the Simplification of Customs Formalities** signed in Geneva, November 3, 1923, by representatives of 21 countries.

Consular and Other Government Services

FUNCTIONS OF CONSULS.—Consuls are agents appointed by one nation to reside in the territory of other nations and charged with the protecting of the interests of their countrymen and with the promoting of commercial intercourse between that country and the country to which they are assigned.

The functions of consuls are varied. The **American consuls** serve practically every department of the government. Their **principal functions** which directly affect the foreign trade merchant are: documentation of merchandise, issuing of landing certificates, bills of health, disinfection of hides, rags, etc., administration of plant quarantine, the visé of passports, maintaining of consular courts in extra-territorial countries and the gathering of trade information.

The American business man can obtain information concerning foreign markets direct from American consuls abroad but he will usually be able to obtain this information through other government channels. The Department of Commerce through the Bureau of Foreign and Domestic Commerce maintains an information service for American business men which ranks high among similar services in foreign countries. Through the commercial attaches, the trade commissioners, and a large number of other investigators a **wealth of material** is gathered and placed at the disposal of the business world.

COMMERCE REPORTS.—The Commerce Reports which appear weekly and may be obtained for **$4 per year**, contain the carefully edited reports sent in by representatives of the Department of Commerce and also reports received from the consuls abroad by the Department of State.

TRADE INFORMATION BULLETINS.—Besides the Commerce Reports, the Bureau of Foreign and Domestic Commerce issues trade information bulletins dealing with conditions in various markets of the world and with technical problems confronting the foreign trader. Since 1921 the Bureau is definitely organized on the basis of commodity groups and geographical divisions corresponding to the industrial grouping of the country's productive activities and to the market interests of the export and import firms of the country.

SERVICE OF BUREAU OF FOREIGN AND DOMESTIC COMMERCE.—The merchant may secure the **aid of the experts of the government free of charge** by correspondence or by personal visits to the office in Washington, the district branch offices in New York, Boston, Chicago, New Orleans, St. Louis, San Francisco, Seattle and Manila or to the co-operating offices established in connection with many of the chambers of commerce.

EXPORTERS' INDEX.—The Exporters' Index prepared by the Bureau consists of American firms who have made application to be placed on the list. They receive information concerning inquiries by firms abroad wishing to purchase American products and concerning the plans and specifications of government projects in which American bids will be considered.

The Cable Service

CABLE ADDRESS.—The **cost of cable messages** is high because of the high rate per word and of the fact that every word in the address and in the signature is counted and paid for. The cable address **reduces the cost** of cables by substituting one word for the address. It is used by all who receive and send cable messages habitually. It is customary to print the address in the heading of letters and bills so that the correspondent may be familiar with it. The American cable companies register cable addresses for $2.50 per year, through a registry office maintained jointly by the various companies.

CABLE CODE.—A cable code is made up of artificial words each one of which represents a phrase. The **tremendous saving** resulting from their use has made them indispensable. A code word must be composed of syllables capable of pronunciation according to the common usage of all of the following languages: German, French, Dutch, Italian, English, Spanish, Portuguese or Latin. The words must not be longer than ten letters. The combinations ae, aa, ao, oe, ue and ch are counted as two letters. Combinations of bona fide words are not permitted; the words must be actual code words.

The usefulness of a code depends upon the following factors: the saving which it will show; the time involved in coding and decoding messages; the liability to mutilation of the words in transmission; the possibility of discovering mutilation and correcting it; the degree of adaptation to the particular business and the cost of the code.

The **standard commercial codes** will fit ordinary business transactions. In order to make the code fit the peculiar needs of any particular business, it will often be necessary to add other words and phrases and to devise new code words for them. It is dangerous to undertake the building of such code words. It is better to refer such problems to a code company so that the code words may not cause confusion in the future.

A private code may be constructed by purchasing from a code company a list of code words and to attach meanings to fit the firm's requirements or the whole problem may be put into the hands of a code company for solution. A

private code cannot be constructed with too much care. The phrases should be clear, logical, and should closely fit requirements and the code words should not interfere with words found in the standard commercial codes so that the private code may be used in conjunction with the standard codes. It is always better to invest some money in a good code than to run the risk of costly mistakes.

MOST RAPID CABLE SERVICE.—The full rate, plain language or code message receives the best service. Frequently it is not necessary to use a straight message. In that case a cheaper rate message may be used.

DEFERRED MESSAGES.—Deferred messages are delayed no more than 24 hours and for that reason may often be used when a delay of one day will not be of great consequence. They must be written in plain language but a cable address may be used. They may be sent only from the cable offices of New York City, Staten Island, Yonkers, Jersey City, Brooklyn, Long Island City, Astoria, Port of New York, Hoboken and the New England states. The charge for these messages is one-half that of the straight messages.

The **cable letter and the week end letter** are other types of cable messages receiving less rapid service than straight messages, but because of the great saving often are excellently suited to weekly communication between the export office and the agents and salesmen in foreign markets.

CODE WORDS FOR ARTICLES LISTED IN CATALOGUE.—In preparing catalogues for foreign markets it is customary to attach to each article listed a code word to be used in cable orders.

Foreign Mail

FOREIGN POSTAL SERVICE.—The international postal service is regulated by the Universal Postal Convention.

CLASSIFICATION OF FOREIGN MAIL.—The classification of foreign mail differs from that of the domestic. In place of the well known four classes, there are: (1) letters, (2) post cards, (3) printed matter, (4) commercial paper, (5) samples of merchandise, and (6) parcel post.

RATES ON FOREIGN MAIL.—The following rates are at present in force for mail from the United States:

Letters—first ounce or less	5 cents
Each additional ounce or fraction	3 cents
Postal cards	2 cents
With additional paid reply	4 cents
Printed matter per 2 ounces (Limit in weight 4 pounds, 6 ounces)	1 cent
Commercial papers—first 10 ounces or less	5 cents
Each additional 2 ounces or fraction (Limit of weight 4 pounds, 6 ounces)	1 cent
Samples of merchandise—first 4 ounces or less	2 cents
Each additional 2 ounces or fraction (Limit of weight 12 ounces)	1 cent

On the basis of special agreements the domestic rate on letters applies to:

Argentina	Bolivia	Colombia
Bahamas	Brazil	Costa Rica
Bermuda	Canada	Cuba

Dominican Republic	Mexico	Peru
Ecuador	New Zealand	Salvador
England	Nicaragua	Scotland
Honduras	Panama	Spain
Ireland		

And some other less important countries.

The domestic rate on postal cards applies to:

Argentina	Cuba	Nicaragua
Bolivia	Dominican Republic	Paraguay
Canada	Ecuador	Peru
Colombia	Honduras	Salvador
Costa Rica	Mexico	Spain

PREPAID POSTAGE.—Postage can be prepaid only by means of postage stamps of the country in which the articles are mailed. When it is desired to "enclose stamps for reply" the sending of local postage stamps from one country to another is therefore useless. **The international reply coupon** has been created for this purpose. These coupons are issued in denominations of 11 cents each and are exchangeable in practically all countries for stamps representing postage on a single-rate letter originating in the foreign country.

On all mail not fully prepaid the postal service collects twice the amount of the deficiency upon delivery. This **"penalty postage"** is a source of unnecessary annoyance. An export firm should exercise great care in affixing sufficient postage to all its outgoing mail, for the impression is often created abroad that failure to do so is only an indication of the carelessness with which all matters are handled by the offending firm.

INFORMATION REGARDING FOREIGN CUSTOMS.—In sending articles of merchandise through the mail the post office cannot give information regarding customs regulations in foreign countries and has no power to question the action taken with respect to dutiable merchandise in other countries.

Foreign Parcel Post

FOREIGN PARCEL POST PROCEDURE.—In sending parcel post packages abroad the following procedure must be followed: The parcel should bear the name and address of the addressee and the words "Parcel Post" on the left-hand corner of the address. A **customs declaration** must be filled out (form 2966) stating contents and value. The blanks may be obtained from any post office.

Customs duties cannot be prepaid but will be collected from the addressees. Parcels cannot be insured but can usually be registered and a return receipt may be obtained without special charge. Parcels cannot be sent C. O. D. In addition to the regular postage a **"transit charge"**—and in a few instances a **"delivery charge"**—may be charged for certain countries. Upon request the post office will issue free of charge a certificate of mailing for each parcel. Duplicates may be obtained for 1 cent each. These certificates may prove useful for purposes of record and to be sent to the addressee as a notice that the parcel was mailed on a certain date.

ADVANTAGES AND DISADVANTAGES OF FOREIGN PARCEL POST.—The international parcel post may be used for the sending of orders of small bulk. Usually the customs formalities in clearing parcel post packages are simple and the services of a customs broker, in other cases almost indispensable,

are almost never required. The objection that parcels cannot be insured by the post office may be overcome by taking out insurance with a private company. The fact that the parcel post reaches almost every nook and corner of the world makes this method of shipping efficient. The principal disadvantages are the limitations upon the weight and size of the package and the relatively high cost of shipping.

CONSIGNEES' MAIL.—It is a common custom for shippers or banks to forward the documents relating to a shipment by the steamship which carries the goods. In this way the documents are certain to arrive at the same time as the goods. Such "consignees' mail" or mail relating to the cargo may be sent by the carrying vessel without postage stamps affixed.

The Freight Forwarder

FUNCTIONS.—The selection of shipping routes, the preparing of shipping documents and other technical details related to the handling of ocean freight may be placed in the hands of specialists. The freight forwarder is such a specialist. He maintains offices in the interior and at the seaboard and has his own representatives or correspondents in many foreign ports. He is in constant touch with railroad and steamship services and can give information regarding routes and rates and can select the best available service. After he receives the necessary information from the shipper, the technical details of preparing documents to satisfy the consular and steamship company's requirements may be left to him.

The seaboard office may often save the shipper trouble and expense by **reconditioning the goods** before delivery to the steamship company, so that a clean bill of lading may be issued, or in breaking up shipments at the port of entry so that the separate packages may be remarked and reshipped.

By **combining small shipments** of various shippers the forwarder is often able to quote better rates and give better service than the shippers could obtain for themselves. In such combination shipments the forwarder takes out the ordinary bill of lading covering the entire shipment and issues his own bills of lading for the various parts of the shipment. Such freight **forwarder's bills of lading** are usually not accepted as collateral by the banks. In case of large shipments the forwarder takes out individual steamship bills of lading.

Although interior shippers will make more general use of freight forwarders than merchants at the seaboard, the special facilities and services which the forwarders have developed appeal to seaboard shippers as well. Shipments **"freight collect"** or **"cash plus charges"** may be made through these agents. Some forwarders perform banking functions. They discount drafts drawn upon the consignees, although most of these are immediately rediscounted with the banks.

PROCEDURE IN MAKING SHIPMENTS THROUGH FREIGHT FORWARDERS.—A shipper from an interior point may send his goods to a forwarding agent at the seaboard and forward by mail the railroad bill of lading and an "advice of shipment" or "shipping instructions" prepared on blanks supplied by the forwarder, or he may consign them to the forwarding department of the steamship company. Most steamship companies now maintain such a department. The facilities offered by these departments are practically the same as those of the regular forwarding agents. In making use of the **steamship company's forwarding department** the shipper is assured the best possible

service the company can render, but he sacrifices the advantage of a choice between carriers which the independent forwarder can exercise.

CHARGES OF FREIGHT FORWARDERS.—The charges of a freight forwarder will consist of a **variety of small fees.** Some of these charges may seem out of proportion to the services rendered. Usually no fault is found with the charge for the cartage or insurance, but the charge for the preparing of the bill of lading is one of those which are sometimes questioned. The amount of work involved in handling the various documents of an ordinary shipment and the certainty that all the documents have been prepared in conformity with all requirements amply justify the usual fee.

The freight forwarder finds his principal source of revenue in the difference between the freight charges paid by the shipper and those paid to the carrier. But even here the shipper is usually the gainer, for, especially on small shipments, he could not have secured any more favorable rates and might have been obliged to pay more.

Where the freight forwarder is instructed to **collect his charges from the importer,** it is good policy for the exporter to request his customer to send him a report of the charges made. There is no other way in which the exporter can know with certainty what the importer has been obliged to pay. Although the importer may undertake to pay the charges it is part of the exporter's function to see to it that these charges remain within the limits of reason and fairness.

Foreign Trade Agents

THE EXPORT COMMISSION HOUSE.—The export commission house is principally the **purchasing agent of the foreign importer.** These purchases may be made according to detailed instructions indicating the sources of supply, or a commission house may be left free to exercise its judgment.

The manufacturer who sells to an export commission firm usually receives **cash upon delivery** of the goods into the hands of the commission house, or extends **the usual domestic terms.** The export commission house attends to all the details of shipping and insurance and passes these charges on to its principals. The house receives a commission which varies with the size of the order, being small for a large order but as high as 5% or more on small orders. The reason for this sliding scale is that there is almost as much work connected with a small order as with a large order and if the same commission were charged the returns on small orders would be insufficient.

Some commission houses also buy on their own account and sell abroad through their own branch houses. Strictly speaking when so doing they act as export merchants or shipping merchants.

As far as the manufacturer is concerned dealing with export commission houses and export merchants does not differ materially from dealing with other domestic firms.

THE MANUFACTURERS' EXPORT AGENT.—The export agent undertakes to sell in foreign markets the goods, usually produced by several manufacturers. The agent in this way takes the place of the export department or export manager. He is paid on a commission basis by the manufacturers who employ him. The advantages are found mainly in the saving resulting from the fact that where there are no sales there are no expenses. The disadvantage lies in the lack of personal interest of the agent in the manufacturing concerns. Sales are his sole object. He must make his returns quickly for he never knows

when the manufacturers may decide to dispense with him and begin to handle exports direct.

THE FOREIGN AGENT.—Although the **selecting of a foreign agent** properly belongs in the sales department, the conditions of the agency contract determine the financial relations between the agent and the exporter and should claim the attention of the financial manager. The same institutions which furnish credit reports may be called upon to suggest reliable firms as representatives in the foreign field. Moreover, the Bureau of Foreign and Domestic Commerce and the United States consuls abroad may give aid. Although not allowed to give credit information they are permitted to aid exporters in obtaining adequate representation. After investigation of the credit standing, and above all of the ability and general reputation for business judgment in the community in which he resides, the agent is appointed and the agency contract is drawn up.

CONTRACT WITH FOREIGN AGENT.—The items which will usually be included in the contract are as follows:

1. **Whether the agent is to be an exclusive agent** or whether other agents may be appointed. It is obvious that only a man of the highest integrity should receive an exclusive agency, for the exporter's success or failure in the market in question is wholly linked to the individual in such contracts. It is also necessary to state clearly what products the agent is to sell so that if at any time in the future the line of the manufacturer is expanded he may be free to decide whether to place the new products in the hands of the agent or to appoint a new agent for them.

2. **The territory is sharply defined.** The territory should not be larger than the agent can successfully develop with the funds at his command.

3. **The duration of the contract.** Ordinarily this should not exceed, say, 5 years.

4. **How the contract is to be renewed.** Renewal will usually take place automatically unless notice is served by either party at an agreed period in advance.

5. **How the contract is terminated.** (a) **By notice.** 6 months' notice before the expiration of the five year period may be required. (b) **By default.** The failure of the agent to sell an agreed quantity of goods will usually give the exporter the right to terminate the contract if he so desires.

6. **How the commission is to be calculated and paid.** (a) The **most logical basis** is the f.o.b. price or cost price at the factory. C.i.f. prices do not form a good basis because they contain items of cost from which the seller does not derive a profit and can therefore not logically pay a commission to others.

(b) The commission will **usually be calculated in percentages.** In highly competitive lines an agreement is sometimes made by which the agent receives a commission over a minimum price and a share in the over price which he is able to obtain.

(c) The **commission should not be considered earned until the goods have been accepted and paid for.** Payment may be made to the agent before that time but in that case the commission will be considered only in the nature of an advance to be repaid or charged against future commissions in case the purchaser fails to honor the draft.

(d) It may be agreed that the earned commission will be paid by bankers draft or that the agent may draw upon the exporter. **Settlement** may take place monthly or quarterly, depending upon the rate of turnover, the cost of selling, and the time required for filling orders.

(e) In the case of an exclusive agent it is customary to pay a commission

on all orders received from his territory whether they have passed through his office or not. In the latter case, the commission is often smaller than on orders received through the agent.

7. **How the price is to be quoted** and whether subject to change with or without notice.

8. **The terms of sale.**

9. Whether the agent is permitted to sell outside his own territory.

10. Whether **the agent may sell other and competing products.** This will depend upon the products and upon the market. The sales possibilities must justify the agent's undivided attention if he is to exclude all other products. Although the handling of competing products may often interfere with the best sales effort, goods which differ sufficiently to open up the possibility of customers' preferences or which in a way supplement each other so as to form a more complete line in price or quality may frequently be successfully handled side by side. The foreign buyers often prefer to deal with the agent who handles the largest line.

11. **In how far the exporter will assist the agent in selling expenses. Advertising expenses are frequently shared.** The contract may call for a definite annual expenditure in which exporter and agent share in a given proportion. The amount to be spent in advertising may be an agreed percentage of the total sales. It is a good policy not to allow the agent any advertising allowance unless the copy is submitted to the home office for approval.

12. **The exporter retains the right to pass upon the credit standing** of the purchasers unless the agent guarantees the credits.

13. **The contract cannot be assigned** to another without the consent of the exporter.

14. **The contract should include a statement indicating the law under which the contract is to be interpreted.**

Although an export firm may have a standard form of agency contract it will usually be necessary to exercise judgment in adapting the contract to a specific market and to the individual agent.

Traveling Salesmen Abroad

EXPENSES OF MANUFACTURER'S SALESMEN ABROAD.—The expenses of the foreign salesman will include besides the customary railroad and steamer fares and hotel bills much larger items for tips than would be allowed in the United States. At least 10% must be added to the hotel bill for tips to the headwaiter who usually presents the bills. In some countries this 10% is added to the bill by the hotel clerk. But in addition it is necessary to tip the head porter, the chambermaids, the elevator boys and pages. There usually is no escape from these extra expenses.

Another appreciable item of expense is the fee for a visé upon the passport demanded by most of the countries of Europe at the present time. To this must be added a possible fee for a license permitting the salesman to sell his goods and make contracts and also import duties on samples and advertising matter.

FUNDS FOR DAILY EXPENSE.—There are several ways in which the commercial traveler may be provided with funds for his daily expenses.

Cash.—The salesman may be given a definite sum of money to carry with him. This is both risky and wasteful. It is always an invitation to robbers to carry large sums of money, and the money carried by the traveler is not earning

any interest. The amount of ready cash should be cut down to the lowest sum practicable.

Drafts.—Safety may be obtained by purchasing drafts upon foreign financial concerns. These may be of different kinds. **An ordinary draft** of moderate size may be carried to be cashed when needed. The advantage is found in safety. The banks abroad will pay only upon a satisfactory identification. The disadvantages are that the money is tied up for a long unproductive period; that it is necessary to determine rather accurately beforehand the amount of money needed in any one town or country, for the drafts can be cashed only at the bank upon which they are drawn. Identification is not always easy and often almost impossible. Though it is possible to send drafts to the salesman when and as needed, this may leave him waiting for the arrival of the draft and it will still be difficult to obtain identification.

American Express checks or American Bankers Association checks may be bought before departure. These are drafts of small denominations drawn upon the European offices of the issuing institutions. The fact that these checks are payable at a large number of institutions in any country of the world, that they are accepted by banks, hotels and restaurants in payment of bills, and that identification is easily accomplished by placing a signature upon the instrument to correspond with the signature placed on the check at the time of purchase, makes this method of carrying funds very convenient. But only pocket money should be carried in this way, to be relied upon in an emergency. This method is too expensive for larger sums. It requires a tying up of funds and the checks are not always acceptable to merchants. Large sums should not be carried this way.

Travelers' or Circular Letters of Credit.—A travelers' or circular letter of credit is the most ideal way of carrying large sums. This letter of credit is no more than a draft drawn by the issuing bank upon all its correspondents abroad. Identification is usually accomplished by means of an **"identification booklet"** in which the signature of the rightful holder and the number of the letter of credit are recorded, and sometimes a photograph, and in which is also given a complete list of correspondent banks. The paying banks make such payments within the total limit of the letter of credit as the holder demands and endorse the amounts thus paid upon the back of the letter.

Besides safety and ease of identification the circular letter of credit offers the possibility of avoiding the tying up of a large sum of money for a long period. The importer's bank will sell a letter of credit outright for a definite sum or will issue such a letter of credit outright for a definite sum or will issue such a letter of credit with the understanding that the exporter's account will be charged with the sums taken up by the salesman as the return drafts of the paying banks arrive at the issuing bank.

THE FOREIGN EXCHANGE RISK.—It is impossible to avoid wholly the risk of foreign exchange fluctuations in the financing of salesmen by the means of the circular letter of credit. The letter of credit may read in dollars or in foreign currencies but in either case the risk is present. When purchasing a letter of credit from the bank the exporter must decide in what currency the letter will be made out. In case he expects the value of foreign currency to decline he will do well to have the letter made out in dollars. He will reap the full benefit of any increase in the value of the dollar. On the other hand should conditions indicate a probable increase in the value of the foreign currency then it is to his advantage to have the credit established in the foreign currency

while it is yet cheap. This choice exists only where the letter of credit is paid for before departure.

OTHER EQUIPMENT OF THE SALESMAN.—Besides the passport and the letter of credit the salesman should be provided with a document which will enable him to prove that he is actually representing the firm and preferably also with a letter of the exporter's bank or of the local chamber of commerce testifying to the reliability of his firm. The exporter should never forget that however well known his firm's name may be in the United States the foreign merchants are very likely not aware of its existence and may sometimes hold back because they know nothing of the firm nor of the salesman soliciting their orders.

The salesman who carries valuable samples should also be provided with **certificates of origin** so that he may obtain the most favorable treatment for his samples from the foreign custom officials. Most countries allow samples to enter free or allow a refund of duties paid upon re-exportation. The difficulties and delays of obtaining the refund will often make it advisable to make no attempt to obtain it.

Customs Requirements

DOCUMENTS REQUIRED.—The foreign office of the American importer or the foreign exporter must prepare the following documents.

Export Declaration.—This is a permit, license or certificate to satisfy the customs authorities of the foreign country.

Consular Invoices.—These are to satisfy the American customs requirements. Every shipment valued in excess of $100 must be accompanied by a consular invoice. These are prepared in triplicate and must contain a correct and detailed statement of the merchandise and of its value in the currency paid. The shipping charges, bounties, or drawbacks are to be separately listed. The invoices must be presented to a consul and sworn to in his presence.

There are different kinds of consular invoices; for goods purchased by the importer; goods not purchased by the importer, and returned American goods. It is important that the invoice should list the articles contained in each container under the number of the package and show the proper identification marks on the invoice.

The **value of the goods** is given in the currency of the country where they were purchased. This value is translated into dollars by the customs officers in the port of importation. They use as their basis for translating the values published by the Secretary of the Treasury on the first day of January, April, July and October, and also the value appearing on the "certificate of the value of currency" which the exporter may have obtained from the United States consul when the goods were shipped and which is attached as a rider to the invoice. By the value of the goods is understood the price of the goods when offered for sale in the usual wholesale quantities packed ready to ship on the date of the consular invoice.

The **three copies of the invoice** are marked "original," "duplicate," and "triplicate." The original is retained by the consul, the duplicate is given to the shipper, the triplicate is forwarded to the collector of customs in the port of destination. The duplicate is then sent by the shipper to the importer.

Special Documents.—Special documents must be prepared for **shipments of food and drug products.** The "declaration of shipper of food and drug

products" is intended to secure the statement from the shipper that the products conform to the health and pure food laws of the country. In shipping hides, hair, seeds, plants, and other animal and vegetable products it is necessary to obtain other documents which state that the goods in question are free from disease or have been disinfected under supervision of the consul.

INSTRUCTIONS TO SHIPPERS.—The importer should give the shipper the necessary instructions so that these documents may be prepared correctly and may not give cause for difficulties and fines. An invoice can show only one destination, but goods originating in different consular districts may be assembled under one invoice. As many goods as go by one steamer should preferably be listed on one invoice. The less documents there are the less danger of their becoming lost, the smaller the consular fees ($2.50 is charged per invoice) and the smaller the fees to be paid in the port of entry.

All Items of Expense Must be Separately Listed.—All items of expense must be separately listed, for ocean freight, insurance, cartage, inland freight, commissions, and brokerage are "non-dutiable" charges.

Description of Goods.—In describing the goods the terms should be as clear as possible and preferably both American and foreign terms should be used.

Goods on Consignment.—Goods sent on consignment cannot be listed on the same invoice with goods purchased by the importer.

Packing Goods.—The shipper should also be instructed how to pack the goods if the goods are to be shipped inland or to be broken up into different lots.

Customs Procedure

NOTICE OF ARRIVAL.—When the goods arrive in the United States the importer or his agent at the seaboard receives notice of the arrival from the steamship office. In order to avoid delays on valuable and rush shipments the shipper may cable advice of shipment giving the name of the vessel. The importer may then ascertain from the steamship company or from the newspapers when the vessel is due to arrive.

CUSTOMS ENTRY.—Every shipment whether dutiable or not must be "entered." This is accomplished by the preparation of a customs entry upon forms provided by the customs service. There are more than twenty different entries. The importer must decide what he will do with the goods and select the proper form of entry. The most commonly used entries are:

Preliminary Entry (P. E.).—This is used for perishable goods and other articles. This special permit allows for inspection and release as soon as discharged but formal entry must be made later.

Appraisement and Informal Entry (A. & I. E.).—This is used for shipments under $100 the exact value of which is unknown because no invoice was produced. The value as arrived at by the appraisal is made the basis for the formal entry.

Informal Entry (I. E.).—For all the goods free of duty; where the duty amounts to less than $100 and for returned American goods.

Consumption Entry (C. E.).—This is the most generally used entry. It is used for goods which the importer wishes to have released immediately upon payment of duty.

Warehouse Entry (Wh. E.).—This is an entry for dutiable goods to be placed in a bonded warehouse, payment of duty being postponed.

There are many variations of this type of entry: **warehouse and transportation entry (Wh. & T.)**; **immediate transportation entry (I. T.)** for the shipment of goods in bonds from the port of entry to another customs district in the United States; **transportation and exportation entry (T. & E.)** for goods to be re-exported after transportation in bond to another port; **exportation entry (Ex.)** for goods to be immediately re-exported; **bonded manufacturing warehouse entry (B. M. Wh.)** for goods to be used in the manufacturing in bond of goods intended for export.

Once an entry is filed changes cannot usually be made. The entry may be made in the owner's name or in the name of the customs broker employed by him. Before the entry is made out the figures appearing in the consular invoice must be checked up. If the importer knows that the invoice values do not correspond to the foreign market values he must be certain to enter the foreign market values in the entry. Any misstatement, intentional or otherwise, will cause the importer trouble and will result in a fine.

IMPORT TARIFF.—The importer must determine under what **classification** in the tariff the goods are located and must calculate the duty. The entry contains the number of the consular invoice, lists **dutiable and non-dutiable values,** the latter surrounded by a circle to prevent them from being included in the total, and shows the net amount on which the duty is to be calculated. The importer also prepares a **"summary of entered value, examination and appraisement,"** which is pasted to the face of the consular invoice. Five copies of the entry are filled out.

BOND FOR MISSING DOCUMENTS.—In case no consular invoice is available the application blank printed on the back of the consumption entry is filled out and a bond must be produced known as a **"bond for missing documents."**

CERTIFICATE OF BILL OF LADING.—A "certificate of bill of lading" must be procured for the original copy which must be filed with the United States customs house and the importer must secure the release of the goods from the carrier by the certificate which states that the original is in the customs house file.

BOND WHEN ORIGINAL BILL OF LADING IS NOT PRODUCED.—A separate bond for double the value of the goods must be produced if the original bill of lading is not available, for the customs service regards this document as evidence of the right of the owner to clear the goods.

BOND FOR PAYMENT OF DUTIES.—Before presenting the entry to the customs officials the importer must procure a bond to protect the government against non-payment of duties due on final liquidation. The "consumption entry bond" covers all these requirements with the exception of the bill of lading bond.

ADVANTAGES OF TERM BOND.—When the importer has a "term bond," his entries may be charged against the term bond. The term bond covers all importations entered within a period of one year.

DOCUMENTS NOTARIZED.—It is now necessary to have the various documents notarized. Importers make such frequent use of a notary that many of them have one of their employees authorized to act as a notary.

PROPER ARRANGEMENT OF DOCUMENTS.—The documents are now arranged in proper order and a certified check for the duty is attached to them. All together in proper order the following documents are sent to the customs house:

1. Certified check
2. Copy of entry and declarations
3. Bonds
4. Certificate for bill of lading
5. Consumption entry permit
6. Consular invoice
7. Bill of lading
8. Consumption entry (four copies)

THE CUSTOMS APPRAISAL.—The goods are taken from the dock to the appraiser's warehouse when the examination cannot take place on the dock. The appraisers are provided by the customs entry division with the copy of the consular invoice and entry. The examiners determine the value and classification and send this information to the customs liquidation department. Here the duties are calculated, the importer is notified of the release of the goods from store. He pays the additional duties, if any, or receives a refund, if any, and orders his goods removed from the appraiser's storehouse.

In case tariff rate, classification, or amount of duties seem incorrect to the importer he may file a protest with the collector of customs. The protests are reviewed by the Board of General Appraisers. Appeal from their decision may be made to the U. S. Court of Customs Appeals and another appeal may be filed with the U. S. Supreme Court in all cases involving a constitutional interpretation.

Penalties are incurred when the appraiser finds the value of the goods understated, and if the value as set by the appraiser is 100% more than the value as declared by the importer, the entry is considered fraudulent and the goods are seized and criminal prosecution may result.

THE IMPORTATIONS IN BOND.—Duties paid on goods unsold represent an appreciable investment and interest loss. It may for this reason prove at times more economical to postpone payment of the duties until the goods have been sold or until the opportunity to sell them seems to have arrived. Many goods, especially holiday goods, are more readily sold if delivery can be guaranteed within a few days. Such goods may be imported in bond. It may also be that it may prove better to re-export the goods. When such goods are in the country in bond re-exportation does not involve any special problem or expense.

BONDED WAREHOUSES.—The United States customs regulations provide for the establishing of bonded warehouses.

Entry to Bonded Warehouses.—The importer after filling out the proper warehouse entry must produce a warehouse bond, for double the amount of the estimated duties. This bond guarantees to the government payment of duties and the performance on the part of the importer of all necessary acts.

The customs inspectors determine the duty before the goods are permitted to be placed in the warehouse. The importer now files three copies of the **"warehouse permit,"** and after receiving one copy properly signed, he can have the goods removed from the custody of the customs service and transported by "bonded truck" to the indicated warehouse. Here the goods may remain for no more than three years.

Withdrawal from Bonded Warehouse for Entry.—When the importer decides to withdraw the goods for sale in the United States the duty must be paid and he would proceed as follows:

He prepares five copies of the "withdrawal for consumption entry" and files these with the customs house together with the permit for warehouse and a certified check for the amount of the duty. The goods are then allowed to be removed from the warehouse and the warehouse bond is released.

Withdrawal from Bonded Warehouse for Re-export.—Should the importer decide to re-export the goods he then files a "warehouse withdrawal for ex-

portation entry" and he must then produce a bond for double the amount of the duty which bond is released only after the shipper has produced a properly filled in Landing Certificate which proves to the customs officials that the goods were actually landed on a foreign shore.

THE DRAWBACK.—When goods upon which import duties have been paid are again exported a **refund of 99%** of the duties paid may be obtained under certain conditions. A "drawback entry" must be filed and the usual export declaration.

THE CUSTOMS BROKERS.—The great complexity of the customs formalities and the risks involved in making even small and unintentional misstatements make the clearing of goods through the American customs the work of a specialist. Few importers can afford to train a man for this service, and most of them depend for their customs work entirely upon the customs broker.

The out of town importer is under no great handicap in not maintaining a seaboard office, for the customs broker when fully instructed by him can attend to all technical matters. The charges of these brokers are small. Entries are charged for at a flat rate of $5 and the cost of bonds is usually 50 cents per $1,000 with a minimum charge of $1.50 or $2. Special charges are made for the collecting of claims, usually on a percentage basis.

Most freight forwarders combine a customs brokerage business with their forwarding work.

SECTION 16

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SECTION 16

FOREIGN EXCHANGE AND FINANCING

Preliminary Considerations

DEFINITION.—Foreign exchange has been defined as an international means of payment; it is a system whereby **money is exchanged between countries** in payment of obligations. An adequate understanding of foreign exchange operations presupposes a knowledge of the theory of money and of monetary standards. A brief survey of this field is therefore appropriate as an introduction to the more detailed considerations of actual operations in foreign exchange.

MONEY AND THE GOLD STANDARD.—Money is merely a **medium of exchange and a standard** by which the value of commodities is measured. Therefore, money itself is a commodity. During the early stages of economic development various commodities in their turn served as a means of exchange. But in the course of time gold and silver have come to supplant all other commodities in this respect and are today the general standards of values. With the exception of China and Persia, practically all the nations of the world are now on the gold basis, at least in theory. Under a complete gold standard exchanges are always effected in gold, directly or indirectly. But this does not mean that gold itself actually changes hands in all such transactions. In fact, very little gold circulates. Based upon confidence and convenience there has grown up a custom of exchanging, instead of gold, demand obligations redeemable in gold, issued as a general rule by governments or banks. Demand obligations of various sorts form the principal circulating medium under modern monetary standards.

Money may, therefore, be divided into **two general classes:**

1. Standard money (gold, under the gold standard).
2. Representative or fiduciary money, redeemable in standard money at a fixed rate represented by its face value.

Between countries on the same basis, the standard money of either, according to its weight and fineness, will ultimately discharge an obligation in the other. This is true because standard money may be melted down and recoined; and because, under normal conditions, its bullion value remains substantially equal to its mint price. On the other hand, fiduciary money is not finally exportable. It may be temporarily exported but it must ultimately return to the country of its origin in order to realize full face value. Excepting some silver coins, fiduciary money generally possesses a face value that is out of all proportion to its commodity value; the commodity value of paper money is practically nil.

The following table relates to the standard money of several prominent countries:

Country	Monetary Unit	Fine Gold Content in Grams	* Par of Exchange with United States
United States	Dollar	1.50463	.....
Great Britain	Pound	7.3223	$4.8665
France	Franc	.29032	.1930
Belgium	"	.29032	.1930
Switzerland	"	.29032	.1930
Italy	Lira	.29032	.1930
Germany	Mark	.35842	.2382
Holland	Florin	.60479	.4020

* Par of exchange between any two of the above mentioned countries may readily be ascertained by making a comparison of the fine gold content of their respective monetary units.

Table giving values of foreign coins in United States currency is given in Section 2, Mathematics of Finance.

Foreign Exchange in Theory

PAYMENTS MADE BY TRANSFERS OF BANK DEPOSITS.—As already noted, the **principal circulating medium** in a gold standard country is representative money, that is, claims upon gold rather than gold itself. This is true also in the field of foreign exchange. Money payment in foreign exchange means deliveries of gold at a given time and place. However, comparatively little actual gold is transferred and this only under certain conditions which will be discussed later under "Specie Points and Shipments." Exchanges are usually effected in **claims upon gold** at such times and places as will satisfy the obligations to be discharged.

For example, an American importer buys from a British exporter merchandise valued at £1000. The obligation of the American importer is to pay to the British exporter, presumably in London, £1000 in gold. The importer can discharge his obligation by shipping actual gold. But such a procedure would be most unusual. As in domestic payments, the common practice is to make the payment with a claim upon gold. The importer will accordingly exchange a claim on New York gold (a check, generally, drawn upon his New York bank) for a claim upon London gold; perhaps a banker's sight draft drawn against the latter's London bank balance, a cable transfer or a time draft, depending upon the nature of the debt. We may say, therefore, that payments in foreign exchange are generally made by **transfers of bank balances** in different countries.

SOURCES OF SUPPLY AND DEMAND.—The principal sources of exchange supply and demand may be classified in general under the following headings:

1. Commercial transactions (including hereunder trade, traffic and travel).
2. Banking transactions.
3. Extraordinary governmental transactions. (This type is very rare.)

The classification which follows is based upon data appearing in Whitaker's "Foreign Exchange."

Nature of Transaction	Supply of Exchange	Demand for Exchange
Commercial Transactions, including Trade, Traffic and Travel		
Commerce in Merchandising.	Drafts against exports drawn upon (consignee, or bank, under letter of credit).	Drafts to pay for imports, remitted to shipper or applied against indebtedness under letter of credit.
Commerce in Securities, Government or Private.	Drafts against sales of securities abroad. Interest and dividend drafts received by domestic holders of foreign securities.	Drafts to pay for securities bought abroad. Drafts to pay interest and dividends to foreign holders of domestic securities.
Investments Other than Purchase of Securities.	Drafts remitted by foreigners, proceeds to be invested here. Drafts against profits on our foreign investments.	Drafts to cover our investments abroad. Drafts to send abroad profits on foreigners' investments here.
The Carrying Trade.	Drafts to recover charges owed our ships by foreigners. Drafts sold to cover expenses of foreign ships in our ports.	Drafts to pay freight obligations to foreign ships. Drafts to pay expenses of our ships abroad.
Miscellaneous Brokers' and Agents' Services.	Drafts to recover brokerage, commission and insurance charges due to us.	Drafts to pay brokerage commission and insurance charges which we owe.
Foreign Travel and Emigration.	Drafts on their home funds by foreigners here.	Drafts to cover expenses of our travelers abroad. Remittances to native land by immigrants.
Banking Transactions		
Banking Transactions governed primarily by relative rates of discount—as borrowing and lending.	Drafts sold to secure funds borrowed abroad. Drafts sold to reduce balances abroad or to transfer funds repaid on account of previous loans made abroad by us.	Drafts bought to repay funds borrowed abroad by us. Drafts bought to increase our foreign balance.
Arbitrage Transactions.	Exchange offered for sale as part of an arbitrage transaction.	Exchange bought as part of an arbitrage transaction.
Gold Shipments.	Exchange for sale against gold export.	Exchange bought to cover gold import.
Speculation.	Offerings due to speculation.	Speculation demand.
Extraordinary Governmental Transactions		
War Indemnities, Purchase of Territory, etc. (as Philippine indemnity, purchase of Panama Canal, etc.).	Exchange offered against governmental credits abroad.	Demand for exchange to meet governmental debts abroad.

TYPES OF EXCHANGE.—The types of exchange may be classified as to the element of (1) **security** or (2) **time.** Classified as to security the following types appear:

1. Bankers' drafts drawn on bankers (including cable transfers).
2. Merchants' drafts on bankers.
3. Merchants' drafts on merchants.

The first two types mentioned offer greater security and are more common than the third type.

APPLICATION FOR CABLE OR MAIL TRANSFER

Guaranty Trust Company of New York

New York, N. Y.

NEW YORK JULY FIRST 1925

DEAR SIRS

WE HEREWITH PURCHASE FROM YOU YOUR CABLE ORDER FOR KR. 14,824.15 UNDER THE TERMS AND CONDITIONS STATED BELOW. THE DIRECT PAYMENT OF THIS AMOUNT TO THE PAYEE NAMED HEREIN THROUGH SUCH AGENCY OR AGENCIES AS YOU OR YOUR CORRESPONDENTS MAY SELECT - PAYMENT FOR THIS ORDER, INCLUDING YOUR CHARGES, WILL BE MADE AS INDICATED BELOW.

		"X" INDICATES MANNER OF PAYMENT	
PAYEE	LARSEN SUPPLY COMPANY	CASH CHECK HEREWITH	
ADDRESS	COPENHAGEN	CHARGE MY OUR ACCOUNT	
		X WILL REMIT NEW YORK EXCHANGE	
ACCOUNT OF	OURSELVES-CONSIGNMENT INVOICED JUNE 4	RATE 20.25	$ 3,001.89
BY ORDER OF	DANISH BUTTER IMPORTING CO., INC., 164 HUDSON STREET, N. Y.	CHARGES COST OF MESSAGE	
		TOTAL	$ 3,001.89

UNLESS OTHERWISE EXPRESSLY PROVIDED HEREON THIS ORDER IS FOR THE PAYMENT OF FOREIGN MONEY IN THE AMOUNT NAMED ABOVE AND THE UNDERSIGNED AGREES THAT THIS TRANSACTION IS TO BE CONSTRUED AS A PRESENT SALE OF SUCH MONEY; THAT THE GUARANTY TRUST COMPANY OF NEW YORK SHALL NOT BE RESPONSIBLE FOR ERROR, DELAY OR DEFAULT OF ANY KIND IN THE TRANSMISSION OF MESSAGES IN EXECUTION OF THIS ORDER, BY TELEGRAPH, CABLE OR MAIL, OR FOR ANY ACTS OR OMISSIONS OF ITS CORRESPONDENTS OR AGENCIES NECESSARILY EMPLOYED BY IT IN THE FURTHER TRANSMISSION AND/OR FINAL PAYMENT OF THIS ORDER, NOR FOR THE FAILURE OF SUCH CORRESPONDENTS OR AGENCIES TO COMPLY WITH THE INSTRUCTIONS OF THE PAYEE; THAT THE UNDERSIGNED ASSUMES ALL RISK OF LOSS OR DAMAGE RESULTING FROM ANY SUCH ERRORS, DELAYS OR DEFAULTS, CAUSE, ACTS OR OMISIONS OR FAILURE TO IDENTIFY THE PAYEE. REFUND WILL BE MADE IF PAYMENT HAS NOT BEEN EFFECTED TO THE PAYEE, EXCEPT WHERE THERE HAS BEEN A FAILURE OF IDENTIFICATION IN MAKING PAYMENT, AS AFORESAID, AT THE EXPIRATION OF SIX MONTHS FROM THE DATE OF THIS ORDER, AND THE GUARANTY TRUST COMPANY OF NEW YORK IS RELIEVED OF SUCH NON-PAYMENT AND THEREAFTER HAS INSTRUCTED ITS FOREIGN CORRESPONDENT TO CANCEL SAID ORDER AND HAS RECEIVED CONFIRMATION OF SUCH CANCELLATION.

SIGNED DANISH BUTTER IMPORTING CO., INC.,

ADDRESS 164 HUDSON STREET, N. Y..

REMARKS PLEASE BILL US FOR CABLE CHARGES.

TRANSFER TO BE MADE THROUGH

MADE UP BY	CALCULATED BY	CHECKED BY	CONTRACT NUMBER

FIG. 1. Order for Cable Transfer

Exchange as to time may be classified as follows:

1. Spot cable transfers.
2. Spot demand or sight exchange.
3. Spot time or long exchange.

Each of these three types may be made the subject of future contracts.

SPOT CABLE TRANSFERS.—A cable transfer results from a cable message between banks located in different countries whereby one bank, at the request of the other, pays a certain specified sum to a designated payee. The obvious advantage of the cable transfer is its speed. It is used in cases of emergency or upon short notice. Cable transfers are sold at the **cable rates of exchange** plus the charge for sending the message. Banks have their own code for such transfers together with a series of test words so that the paying bank can confirm the source of the cablegram.

Spot cables on London sold in New York from day to day mean that dollars will be paid in New York the day following the purchase for sterling to be paid in London upon arrival of the cable. Due to the difference in time, payment will probably be made in London the following day. In case of delayed payment in London due to cable difficulties, the buyer of the cable transfer is usually **allowed interest** at the London deposit rate. However, in making a contract to transfer funds by cable the bank usually insists on inserting a **disclaimer clause** under which it is protected from delays beyond its control and under which exchange rates are based for future adjustment. (Fig. 1.)

SPOT DEMAND EXCHANGE.—This type of exchange is usually a **draft payable on demand,** drawn by a bank in the United States on its branch or correspondent in a foreign country. An importer of goods may send such a check to a foreign exporter who is named in the check as payee. The payee cashes the check at his bank as he would an ordinary check.

A buyer of a sight draft on London, if his credit standing is satisfactory, usually receives the draft on the day before the sailing of the first mail steamer for England. He pays for the draft on the day following unless it be Sunday or a holiday, in which case the buyer pays on the day when the draft is delivered to him. Sterling will be paid in London upon arrival and presentation of the draft. Interest is charged by the London drawee against the account of the New York drawer from date of receipt of the advice covering the draft, whether the draft has been presented or not. As a precaution against loss in transmittal, drafts are customarily **forwarded in duplicate** by different steamers, the first to arrive being presented for payment.

FOREIGN CHECKS.—Banker's draft drawn in sterling is illustrated in Fig. 2.

BANK DRAFTS IN DOLLARS.—Since the close of the World War exchange on various foreign countries has fluctuated violently at times. Many concerns having financial transactions with such countries, particularly those with depreciated currencies, have desired to retain the value of their remittances in dollars until a favorable opportunity was presented to convert their dollar drafts into the currency of those countries. Bankers have accordingly made arrangements to draw such drafts in dollars on banks in practically all European countries and to some extent in Asia and South America.

Although dollar drafts are expressed in dollars, **payment is not necessarily made in dollars,** but may be made in the currency of the foreign country, at the current rate of exchange for buying drafts on New York on the day the draft is presented for payment.

SPOT LONG OR TIME EXCHANGE.—A purchaser of a **sight time bill** on London (one maturing a specified number of days after sight) will exchange dollars in New York upon the same basis as in sight exchange. Sterling will be paid in London upon maturity of the bill. But if the exchange be a **date bill** (maturing a specified number of days after date) the purchaser will exchange dollars against delivery of the exchange. Sterling will be paid in London at the bill's maturity.

Guaranty Trust Company of New York

No 8688 New York JULY FIRST 1925

Pay against this Check (Original being unpaid) to the order

of BRIGGS WAINWRIGHT & COMPANY LIMITED* * * £759-12-3-STG

***SEVEN HUNDRED FIFTY NINE POUNDS TWELVE SHILLINGS THREE PENCE * * * * * £ STERLING

To GUARANTY TRUST COMPANY OF NEW YORK
32 LOMBARD STREET
LONDON.

Per Pro _____

Per Pro _____

Guaranty Trust Company of New York

No 8688 New York JULY FIRST 1925

Pay against this Check (Duplicate being unpaid) to the order

of BRIGGS WAINWRIGHT & COMPANY LIMITED* * * £759-12-3-STG

***SEVEN HUNDRED FIFTY NINE POUNDS TWELVE SHILLINGS THREE PENCE * * * * * £ STERLING

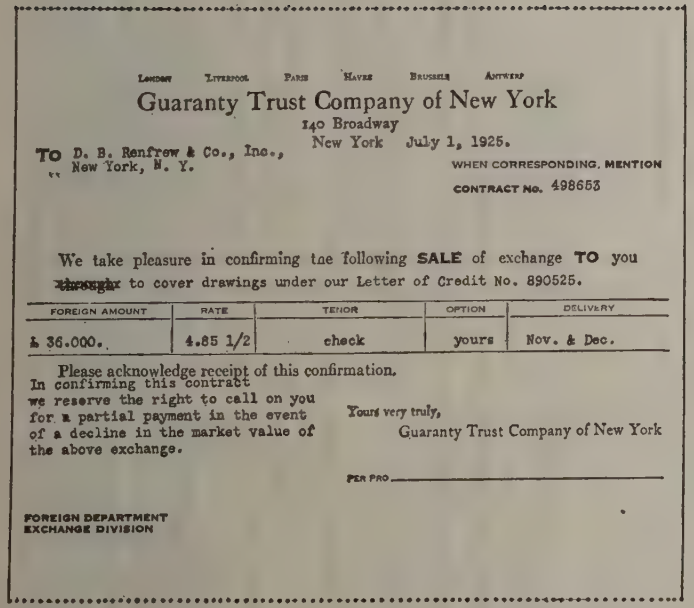
To GUARANTY TRUST COMPANY OF NEW YORK
32 LOMBARD STREET
LONDON.

Per Pro _____

Per Pro _____

Fig. 2. Demand Bank Draft on London

FUTURE CONTRACTS.—As stated by the Guaranty Trust Company of New York, experience has demonstrated that when the American importer buys merchandise abroad in terms of any foreign currency, it is generally advisable for him to enter into a future contract with a bank to purchase the amount of foreign exchange involved, whether the shipment is to be prompt or is not to be made for some weeks or months to come. In this way, the cost price of the merchandise can be immediately ascertained and the importer is protected against a possible rise in the exchange which, if left uncovered,



LONDON LIVERPOOL PARIS HAVRE BRUSSELS ANTWERP

Guaranty Trust Company of New York

140 Broadway

New York July 1, 1925.

TO D. B. Renfrew & Co., Inc.,
New York, N. Y.

WHEN CORRESPONDING, MENTION
CONTRACT No. 498653

We take pleasure in confirming the following **SALE** of exchange **TO** you ~~through~~ to cover drawings under our Letter of Credit No. 890525.

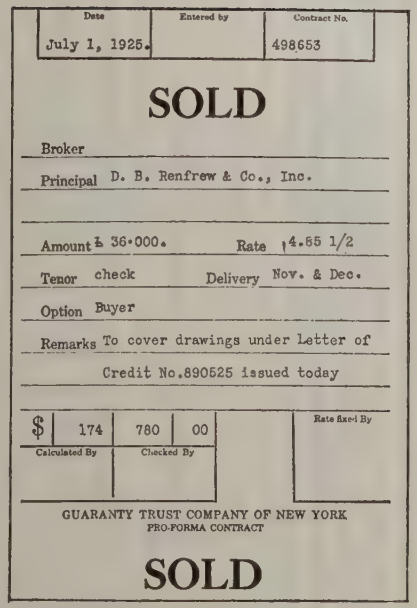
FOREIGN AMOUNT	RATE	TENOR	OPTION	DELIVERY
£ 36.000.	4.85 1/2	check	yours	Nov. & Dec.

Please acknowledge receipt of this confirmation.
In confirming this contract we reserve the right to call on you for a partial payment in the event of a decline in the market value of the above exchange.

Yours very truly,
Guaranty Trust Company of New York

PER PRO _____

FOREIGN DEPARTMENT
EXCHANGE DIVISION



Date	Entered by	Contract No.
July 1, 1925.		498653

SOLD

Broker

Principal D. B. Renfrew & Co., Inc.

Amount £ 36.000. Rate 4.85 1/2

Tenor check Delivery Nov. & Dec.

Option Buyer

Remarks To cover drawings under Letter of Credit No.890525 issued today

$	174	780	00	Rate fixed By
Calculated By		Checked By		

GUARANTY TRUST COMPANY OF NEW YORK
PRO-FORMA CONTRACT

SOLD

FIG. 3a. Used in Connection with a Future Sale of Exchange

LONDON LIVERPOOL PARIS HAVRE BRUSSELS ANTWERP

Guaranty Trust Company of New York

140 Broadway
New York, July 1, 1925.

TO Messrs. Williams Green & Company
Dallas,
Texas.

WHEN CORRESPONDING, MENTION
CONTRACT No. 496829

We take pleasure in confirming the following **PURCHASE** of exchange **FROM** you through Sixty days documentary draft on an approved English bank covering 200 bales cotton.

FOREIGN AMOUNT	RATE	TENOR	OPTION	DELIVERY
£ 7714.4.6	4.81	60 days	yours	October

Please acknowledge receipt of this confirmation.

In confirming this contract we reserve the right to call on you for a marginal payment in the event of an appreciation in the market value of the above exchange.

Yours very truly,
Guaranty Trust Company of New York

Per Pro.

FOREIGN DEPARTMENT
EXCHANGE CONTRACT DIVISION

Date	Entered by	Contract No.
July 1, 1925.		496829

BOUGHT

Broker

Principal Williams Green & Company
Dallas

Amount £ 7714.4.6 Rate 4.81

Tenor 60 days Delivery October

Option Seller

Remarks As per telegram of July 1st
Draft will be drawn on an approved English bank with usual documents attached covering 200 bales cotton.

$	37	105	42
Calculated By		Checked By	

Rate fixed By

GUARANTY TRUST COMPANY OF NEW YORK
PRO-FORMA CONTRACT

BOUGHT

FIG. 3b. Used in Connection with a Future Purchase of Exchange

might wipe out all of his anticipated profit on the transaction. It is equally true that if the exchange in question were left open and a fall occurred, the importer might stand to make additional profit.

Similarly, the American exporter who sells goods abroad in terms of foreign money should protect the transaction by a future contract with a bank. In negotiating with a foreign buyer he must necessarily ascertain the rate of exchange **in order to fix a profitable selling price** and when the sale is concluded and the exchange covered as of that day, he is assured of being able to take his profit at the time of shipment.

Future contracts can be fixed for delivery at any time during a given month at buyer's or seller's option respectively, but a closer rate can generally be quoted when delivery during the first or the second half of a particular month is specified. In the case of imports the importer has to approximate not only the arrival of the merchandise but the additional time it will take him to sell and deliver it and to receive payment.

It should be pointed out that future exchange is often at a premium over spot exchange, the premium becoming larger in direct proportion to the length of time involved. This premium, accordingly, must be allowed for in quoting a price for goods to be exported, or in bidding for goods to be imported.

The future contract is a definite agreement between the buyer or seller of exchange and the bank, and both parties have to live up to it. The contract conveys no option privilege except that it may be extended or shortened by mutual agreement. The bank takes no speculative position in entering into such contracts as it undertakes only those which can be immediately covered by an offsetting sale or purchase. The rates for forward exchange vary according to supply and demand as in the case of spot exchange. That there is a regular market for forward exchange is clearly demonstrated in the foregoing paragraphs. The operations of the importer seeking to protect himself by a forward purchase, and of the exporter seeking to protect himself by a forward sale, are concluded through the banks, which thus act as a clearing house for these operations.

Forms used in contracts of future sales of exchange are shown in Figs. 3a and b.

When such contracts are entered into between responsible parties for the purchase or sale of exchange for future delivery, no funds are transferred until the delivery date contemplated in the contract. Upon maturity of the contracts the purchase or sale becomes a spot transaction at rates previously agreed upon; both local and foreign deliveries are made according to the particular type of exchange involved.

QUOTATIONS AND SPREADS.—In a market free from abnormal influences the rates for the various types of exchange tend to **rise or fall together** with a certain spread existing between sight exchange and cables and a different spread between sight and long exchange. In other words, sight exchange may be regarded as the basis upon which are calculated the rates for cables and long exchange. The following table shows the quotations ruling in the New York market for various European exchanges on a day in May 1925.

The table shows that the rate for demand sterling was $4.85¼ per pound and that for sterling cables was $4.85½. This premium of ¼ cent per pound sterling is due to the fact that a payment can ordinarily be effected by cable about **6 days sooner** than by sight draft. The expense of cabling is not considered in fixing the rate; the premium is due solely to interest, which is figured at the London rate for deposits because a remittance by cable will create a deposit balance available in London usually for 6 days during which a sight draft would

FRIDAY, MAY 15, 1925

EUROPE

	Yesterday	Previous day	Year ago
GREAT BRITAIN (par $4.86 a sovereign)			
Demand	4.85¼	4.85¼	4.36⅝
Cables	4.85½	4.85½	4.36⅞
60-d bills	4.80¾	4.80¾	4.33⅞
90-d bills	4.78⅞	4.78⅞	4.33⅝
FRANCE (par 19.3 cents a franc)			
Demand	5.20	5.22	5.76
Cables	5.20½	5.22½	5.76½
BELGIUM (par 19 cents a franc)			
Demand	5.04½	5.05¼	4.85½
Cables	5.05	5.05¾	4.86
SWITZERLAND (par 19.3 cents a franc)			
Demand	19.35	19.35	17.71
Cables	19.36	19.36	17.73
ITALY (par 19.3 cents a lira)			
Demand	4.06¾	4.09½	4.44½
Cables	4.07½	4.10	4.44¾
HOLLAND (par 40.2 cents a florin)			
Demand	40.18	40.19	37.38
Cables	40.20	40.21	37.42
GERMANY (par 23.8 cents a mark)			
Demand	23.81	23.81	———
Cables	23.82	23.82	———
AUSTRIA (par 20.3 cents a crown)*			
Demand	.0014⅛	.0014⅛	.0014⅛
Cables	.0014⅛	.0014⅛	.0014⅛
NORWAY (par 26.8 cents a crown)			
Demand	16.75	16.83	13.87
Cables	16.77	16.85	13.90
SWEDEN (par 26.8 cents a crown)			
Demand	26.74	26.74	26.53
Cables	26.76	26.76	26.56
DENMARK (par 26.8 cents a crown)			
Demand	18.73	18.83	16.87
Cables	18.75	18.85	16.90
SPAIN (par 19.3 cents a peseta)			
Demand	14.45½	14.48	13.85
Cables	14.46½	14.49	13.87
PORTUGAL (par 108.05 cents an escudo)			
Demand	5.00	5.00	3.12½
Cables	5.05	5.10	3.12½
GREECE (par 19.3 cents a drachma)			
Demand	1.85	1.86	2.05
Cables	1.85	1.86	2.05½
POLAND (par 19.3 cents a zloty)			
Demand	19.25	19.25	.000011
Cables	19.25	19.25	.000011
CZECHO-SLOVAKIA (par 20.3c a crown)			
Demand	2.96½	2.96½	2.95¼
Cables	2.96½	2.96½	2.95¼
JUGO-SLAVIA (par 19.3 cents a dinar)			
Demand	1.62⅜	1.62½	1.24
Cables	1.62⅜	1.62½	1.24
RUMANIA (par 19.3 cents a leu)			
Demand	.48⅛	.48¾	.49¾
Cables	.48⅛	.48¾	.49¾
FINLAND (par 19.3 cents a mark)			
Demand	2.52½	2.52½	2.52
Cables	2.52½	2.52½	2.52

FAR EAST

CHINA (Shanghai dollars, par unsettled)			
Demand	54.75	54.75	———
Cables	55.12½	55.12½	———
CHINA (Shanghai, taels, par unsettled)			
Demand	74.50	74.50	71.00
Cables	74.75	74.75	71.25
CHINA (Hongkong, par unsettled)			
Demand	55.12½	55.00	52.00
Cables	55.25	55.12½	52.25
JAPAN (par 49.8 cents a yen)			
Demand	42.00	41.87½	40.37½
Cables	42.25	42.12½	40.50
INDIA (par 48.65 cents a rupee)			
Demand	36.50	36.50	30.62½
Cables	36.62½	36.75	30.75
STRAITS SETTLEMENTS (par 56.8 cents a dollar)			
Demand	57.00	57.00	51.00
Cables	57.25	57.25	51.25

THE AMERICAS

ARGENTINA (par 42.44c a paper peso)			
Demand	39.75	39.62½	32.87½
Cables	39.87½	39.75	33.00
BRAZIL (par 32.45 cents a paper milreis)			
Demand	10.10	10.10	11.00
Cables	10.15	10.15	11.05
PERU (par $4.86 a pound)			
Checks	4.10	4.10	4.09
ECUADOR (par 48.60 cents a sucre)			
Checks	2.92	2.92	25.00
CHILE (par 36.5 cents a peso)			
Checks	11.75	11.62½	11.30
URUGUAY (par 103.42 cents a peso)			
Checks	96.50	96.75	78.25
VENEZUELA (par 19.3 cents a bolivar)			
Checks	99.30	99.30	19.19

Canadian Exchange—New York funds in Montreal, par; Montreal funds in New York, par.

* Since the date of this table Austria's monetary unit has been changed from the crown to the schilling. The price of one schilling represents the value of 10,000 crowns. The following quotations appeared in the New York Times on August 20, 1925:

AUSTRIA (Par 14.125 cents per schilling)				
Demand	14.125	14.125	14.125	.0014⅛
Cables	14.125	14.125	14.125	.0014⅛

be in transit. Using the sight rate of $4.85¼ and a deposit rate of 3% in London, the approximate **cable rate** is computed as follows:

Rate for sight exchange on London	$4.8525
Add: interest for 6 days at 3% (approximately 1/20% of $4.85+)	.002425
Approximate cable rate	$4.854925

For purposes of quotation this figure is $4.85½.

The buyer of a banker's 90-day bill can secure the equivalent of a sight draft by arranging to discount the bill upon arrival and acceptance in London. Assuming the acceptance fee to be 1/8% and the British stamp tax to be 1/20%, the **rate for 90-day bills** is computed as follows:

Rate for sight exchange on London		$4.8525
Deduct: Interest for 93 days (including 3 days' grace) at 4⅝%, the "for arrival" discount rate.	$.056	
⅛%, acceptance fee	.006	
1/20%, stamp tax	.0024	.0644
Approximate parity for 90-day bill		$4.7881

TENDENCY TOWARD EQUIVALENCE.—Exchange rates under normal conditions exhibit the following major tendencies:

1. In a given center the rates for various types of exchange incline to equivalence, considering the factors of **interest and expense.**
2. The rates in two or more centers incline to equivalence for each type of exchange. This is largely due to the **practice of arbitrage** whereby disparities are taken advantage of by shrewd traders for the purpose of profit.

ARBITRAGE.—In discussing arbitrage, assume the following conditions:

Cables in New York.....$4.85 per £ sterling
Cables in London.....$4.84 per £ sterling

From the above figures it is apparent that a New York banker can sell a cable for $4,840 in London and realize £1,000.

At the same time he can sell in the New York market a cable for this £1,000 and realize $4,850. His **gross profit** on the transaction is $10 from which cable and other expenses must be deducted. On the other hand, he can sell a cable for £1,000 in the New York market for $4,850 and with the proceeds buy in the London market £1,002-1-5. In the one case the profit is realized in dollars, in the other in sterling.

A hypothetical case of arbitrage between three centers will now be considered:

Cables in New York and London.....$4.85 per £ sterling
Cables in New York on Amsterdam.....$.40 per florin
Cables in Amsterdam on London ...fl.11.20 per £ sterling

$1,000 invested in New York in a cable on Amsterdam will purchase fl. 2,500. This sum in Amsterdam will purchase a cable on London for £208⅓. This amount in sterling in London will purchase a cable on New York for $1,010.42 leaving a profit of $10.42 before considering expenses. Cable expenses in this particular case would exceed the possible profit; but the illustration serves to demonstrate the manner in which arbitrage regulates rates in various active centers.

EXCHANGE AND DEPRECIATED CURRENCY.—In a gold standard country the currency begins to depreciate when future gold takes the place of

pot gold. As in the recent case of Great Britain and the United States, before he former's return to the complete gold standard exchange continued to mean n exchange of bank deposits in two different financial centers. But, whereas ank deposits in New York signified **spot gold,** bank deposits in London signified **uture gold.** A London purchase of dollars was equivalent to an exchange of ondon gold in the future, however indefinite, for spot New York gold. A ondon purchase of actual gold (obtainable then only at a premium over urrency) represented an exchange of currency for spot London gold. The ovement of specie was therefore determined by the price of gold in London nd the rate of exchange. The **par of exchange** no longer remained at $4.8665 ut had assumed a fluctuating character and might be defined as the spot cable ate which represented the **price of gold in the London market.** This fluctuating ar varied as the premium on gold varied in London, in other words as the urrency depreciated.

SILVER EXCHANGE.—It has already been stated that China and Persia here to the silver standard. In a silver standard country gold is merely a ommodity. In a gold standard country silver is a commodity. In exchanges etween gold and silver standard countries there are consequently **two pars.** he **gold par** varies with the price of gold in the silver standard country; the **ver par** varies with the price of silver in the gold standard country. Each r has its specie points. As a result, therefore, three separate markets tend universal parity: (1) gold in a silver standard country; (2) silver in a gold andard country; (3) exchange market in each country.

Practical Operations

FOREIGN EXCHANGE MARKETS.—Exchange on practically all active arkets is bought and sold in the leading financial centers of the world. In is country New York is the center of the foreign exchange market. Some ew York, Chicago and Boston banks maintain **branches in foreign centers** facilitate the transaction of their business. Checking and time deposit counts may be opened with these branches through the intermediary of the ad offices. Additional deposits can be made through the offices of such nks in this country. The foreign branch accounts may be maintained **in ollars** or **in the foreign currency.** Sometimes favorable interest is allowed on lances above certain amounts.

Other banks, notably private bankers and foreign exchange bankers, have merous **foreign correspondents** with whom they work in closest harmony, gaging in varied transactions for both individual and joint account. Sub- quent discussion of the subject will be from the angle of the foreign exchange nker with numerous correspondents.

NEW YORK MARKET.—The New York foreign exchange market centers out the foreign exchange bankers and brokers and the foreign exchange partments of the leading banks and trust companies. The **foreign exchange oker,** as his name implies, acts as an intermediary between the leading bankers d also between the bankers and others who have occasion to enter the ex- ange market. Many **interior banks** buy and sell foreign exchange but usually so in close co-operation with their New York correspondents, since such al banks do not, as a rule, maintain balances abroad. Foreign exchange arkets exist in some other cities, Boston and New Orleans, for example, t their local activities are circumscribed and few transactions of importance e consummated independently of the New York market. But it must not

be inferred that the foreign exchange bankers make the market. It is true that banking transactions exercise considerable influence on the market and that arbitrage transactions can accomplish much in regulating rates. The market is affected, however, by forces which are much deeper, that is, by fundamental conditions in world trade, which tend to provide the available supply of exchange and the demand therefor in all world markets.

FUNCTIONS OF FOREIGN EXCHANGE BANKER.—The functions of the foreign exchange banker fall into **two general classes:**

1. Purchase and sale of exchange.
2. Commercial activities such as,
   - Financing of imports and exports through commercial letters of credit issued in New York or by correspondents abroad.
   - Issue of travelers' letters of credit, travelers' checks and delegations.
   - Collection of drafts.

The **compensation** realized on the first class of transactions usually results from the margin between the prices at which the banker buys and sells the same type of exchange; in arbitrage between different types of exchange or between different markets; and from the purchase of commercial bills (inferior to bankers' bills in point of security) and the subsequent sale of bankers' bills at a higher rate. Compensation from transactions in the second class comes from commissions charged clients for the specific service performed, commissions which may sometimes be shared with a foreign correspondent.

Many of the larger city banks are now in a position to give their customers a complete foreign banking service. In order to round out this service such banks maintain special departments chiefly to expand foreign trade and to attend to the shipment of merchandise to and from foreign countries. These are essentially service departments and contribute to the income of the banks only indirectly by acting as feeders to other departments.

REQUISITES OF A COMPLETE FOREIGN BANKING SERVICE.—In order that a bank may be of greatest assistance in its foreign service to its customers, it must possess the following:

1. Knowledge of Foreign Banking Methods and the Needs of its Customers.—The bank should know the various methods used in handling the particular foreign banking problems which will best serve the needs of the customer. The customer in turn should be so specific in making his needs known to the bank that it may readily select the best available method of satisfying them.

2. Bank Personnel.—The bank should have a well trained and experienced personnel to handle all the details of complicated foreign transactions.

3. Sources of Information.—The bank should have reliable sources of information in foreign countries regarding political, economic and financial conditions as well as credit information relating to the more important business concerns of those countries.

The financial manager should assure himself that a bank is adequately equipped, or has a correspondent which is equipped, to render good service. There is a wide variance in the class of foreign service rendered by different banks.

SERVICE.—In addition to the functions enumerated above, banks which have a foreign banking service also perform the following:

Safe-keeping foreign securities.
Gathering and compiling foreign trade information.

Acting as agents for foreign governments, corporations, firms and individuals.

CREDIT INFORMATION.—Some of the larger banks maintain **foreign credit departments** through which they can furnish their clients information concerning the credit standing of foreign firms and also supply valuable information concerning commercial conditions prevailing in various countries.

TRANSLATIONS.—Business men receiving letters and various kinds of documents in foreign languages may receive authentic translations through banks which carry on an extensive foreign service. A nominal charge is usually made for such translations. In one large New York bank with an extensive foreign service there are 15 men and women in the **translation department** who read, write and speak 27 languages and who translate over a quarter million letters annually.

BANK BALANCES MAINTAINED.—In order to function as a buyer and seller of exchange the banker maintains balances not only in New York but also in all the leading financial centers; in some cases, more than one balance is maintained in the same foreign center. **A purchase of exchange** in New York means a depletion of a New York balance which is offset by a corresponding increase in a foreign balance when the exchange is remitted to the foreign center for discount or collection. **A sale of exchange** increases the New York balance but brings about a corresponding decrease in a balance abroad. Experience and business conditions generally determine the proper amounts at which the various balances shall be maintained. It is, therefore, the usual practice to offset a purchase of exchange by a sale of a similar amount, although not necessarily of the same type, either as to time or security. For example, a purchase of a 90-day commercial bill may be offset by the sale of banker's bills of various maturities, sight drafts or cables. It is even possible that a spot purchase may be offset by a future contract. The type of exchange sold will depend altogether upon the prevailing market demand and the possibilities of profit.

OPEN MARKET TRADES.—If the banker is unable to strike an approximate balance in his trades with clients he may even up his position by open market trades with other banks which are in a similar situation. Open market trading of this character usually is conducted through brokers and in round sums. It is also carried on in order to arbitrage between different types of exchange.

LENDING SURPLUS FUNDS.—It sometimes happens that the banker's various balances exceed the immediate or prospective needs of his business. He has funds available for lending and a choice of markets in which to lend. Where shall the loan be made? If the rate for futures on London is at parity with spot, regardless of any difference in interest rates, the loan will yield the same in either market provided no speculative position is taken in exchange and any transfer of funds is accompanied by an offsetting sale or purchase of futures. On the other hand, if **futures** are **above parity for spot** it will be more advantageous to lend in London. Conversely, when **futures** are **below spot,** the funds can be loaned to better advantage in the New York market. These facts may be illustrated by the following:

New York interest rate	5%
London interest rate	4%
Spot cables in New York and London	$4.85
Future cables (90 days) in New York and London	$4.862

Illustration: Assume that a New York banker has £1,000 in London, which he wants to lend for 90 days, either there or in New York, depending upon which will net him the higher return. Loaned in London at 4%, the principal and interest will amount to £1,010 at the end of the period. Suppose, however, the loan was made in New York instead. The sale of £1,000 of spot cables at the prevailing spot rate of $4.85 would make the principal amount of the loan $4,850, which immediately loaned out for 90 days at the rate of 5% would increase the sum to $4,910.63 at the end of that period. If now he succeeded, as is assumed, in buying a 90-day future cable in London for £1,010 at the rate of $4.862 when he made the loan, he would pay on this future contract at the end of the 90-day period exactly the amount of his New York dollar loan plus interest, or $4,910.63 (£1,010 × 4.862). Thus it is evident that under the conditions assumed as regards interest rates in London and New York, and rates for future and spot sterling cables, he will fare equally well whether he makes his loan in London or in New York, since in either case he will have at the end of the loan period £1,010 in London. In those circumstances, therefore, the future cable rate of $4.862 is said to be at parity with the spot cable rate of 4.85. If, however, the future rate were actually quoted in the market above this parity rate of $4.862, it would obviously pay the banker to make the loan in London. On the other hand, if the market were quoted below the parity rate, it would pay the banker to make his loan in New York. This example makes it clear that the position of the parity rate for future cables depends on the relation of the New York and London interest rates.

The **future parity of spot** may be computed by the following formula:

$$\frac{\text{Spot rate} + \text{interest at New York rate}}{100\% + \text{interest at London rate}} = \text{future parity of spot.}$$

Substituting in this formula the figures used in the foregoing illustration the future parity is ascertained in the following manner:

$$\frac{\$4.85 + (1\frac{1}{4}\% \times \$4.85)}{100\% + 1\%} = \frac{\$4.91063}{101\%} = \$4.862, \text{ approximately.}$$

TRANSACTIONS PRODUCING SUPPLY OF EXCHANGE.—Transactions producing the available supply of foreign exchange and the demand therefor center about the commercial activities of the foreign exchange banker and may be classified as follows:

1. Financing imports and exports without letters of credit.
2. Financing imports and exports by commercial letters of credit issued in New York or issued abroad through correspondents.
3. Issue of travelers' letters of credit.
4. Collection of drafts.

Were it not for the demands of foreign trade there would be comparatively little business in foreign exchange. The exporter may sell abroad on the basis of dollars or foreign currency; the importer may purchase abroad on either basis. In any case a foreign trade transaction will produce a supply of exchange or a demand for exchange in some market. The cumulative effect of such foreign trade is the **fundamental basis of the foreign exchange market.**

Financing Foreign Trade

The methods of financing foreign shipments may be divided into two groups. The first group includes the methods by which the exporting firm undertakes

to carry the foreign customer. The second group includes the methods which the importers may use to carry the financial burden.

ADVANTAGES AND DISADVANTAGES OF EXPORTER FINANCING BUYER.—The advantages are found in the greater ease of selling and the possibility of granting extensions if payment proves difficult. But these are usually more than offset by the danger that the purchaser, in time of stress, may give first attention to the local or more easily pressed foreign obligations, or may make claims based upon supposed imperfections in the merchandise which would make collection even by legal process extremely difficult and expensive.

FINANCING FOREIGN TRADE WITHOUT LETTERS OF CREDIT.—The various risks attendant upon purely domestic business are increased manifold when foreign trade is undertaken. This is due to the distance between buyers and sellers and to the fact that they are operating in different countries, under different customs and using different languages. Frequently it is difficult to determine the credit risk adequately. Funds must necessarily be tied up for a considerable period. Under these circumstances the foreign exchange banker can be of much assistance. Acting, with his correspondents, as an **intermediary between buyer and seller** he is often in a position to calculate the risk with accuracy and to finance shipments to the advantage of all concerned.

Illustration: An exporter in New York receives an inquiry from a London importer requesting quotations on merchandise of a certain sort. The **quotations** may contemplate delivery to the railroad at an interior point, delivery in New York f. o. b. (free on board steamer), f. a. s. (free alongside steamer), c. i. f. British port (cost, insurance and freight), or c. and f. (cost and freight to British port). In case of a sale f. o. b. New York, the merchandise will be delivered on board the steamer when title will pass to the buyer. If the sale be f. a. s. New York, the merchandise will be delivered alongside the steamer, at which point title will pass to the buyer. But the more common quotations are c. i. f. and c. and f.

However, the shipper assumes no risk beyond the steamer even if the sale be made according to these latter quotations. He acts merely as agent for the buyer in arranging for freight and insurance and takes these charges into consideration in calculating his selling price. Under normal conditions the **c. i. f. quotation** is the **usual procedure,** although the c. and f. quotation is often requested, particularly when the buyer is in a position to effect insurance more cheaply than the seller. Assuming a c. i. f. quotation, the seller will calculate the price (including his profit) at which he is prepared to sell at the point of embarkation. He will add the freight and insurance charges and interest on the entire outlay during the period when his funds will be outstanding according to the credit arrangements effected. If the quotation be made in dollars the seller will not need to consider the exchange risk. If the quotation is to be made in foreign currency, the question of foreign exchange rates must not be overlooked; otherwise an apparent profit may turn out to be a serious loss.

CREDIT ARRANGEMENTS.—The credit arrangements may take any one of several forms:

1. Open account.
2. Documents against acceptance (D/A)
   - (a) Acceptance by buyer.
   - (b) Acceptance by domestic bank.
   - (c) Acceptance by foreign bank.

3. Documents against payment (D/P)
   (a) Payment by buyer.
   (b) Payment by domestic bank.
   (c) Payment by foreign bank.

OPEN ACCOUNTS.—Open credit selling in foreign trade is **not the customary practice,** although such transactions do take place where conditions permit or require them. This method cannot, as a rule, be recommended for export shipments except to nearby countries like Canada or Cuba, the commercial conditions of which can be closely watched, and even then only to firms of the highest standing with which the exporter has had favorable credit experience in the past. Where the export house has efficient local representatives, who can attend to adjustments and can keep a constant check upon credit conditions, shipments on open account may be made where competition forces a liberal credit policy. In all other cases this method is not to be recommended.

TIME AND METHODS OF PAYMENT OF OPEN FOREIGN ACCOUNTS.—Payment under open account may be arranged for each individual shipment a definite period after shipment or it may be agreed that the settlement is to be made at certain times of the year, say at the end of each quarter, for all shipments made during the period. In either case the **usual procedure** is that the seller draws a draft upon the buyer and presents this draft for collection to his bank. Another method of settlement would be for the buyer to purchase a bank draft upon the exporter's city and to mail this to him upon the agreed date. In order to have the use of the funds as long as possible, the buyer may wait until the day before the funds must be in the hands of the exporter and buy a cable transfer.

Periodic settlement was at one time quite commonly made between German commission houses and their over-sea connections. Usually the agreement was reciprocal and applied to all shipments in either direction. Interest was then charged by both houses on unpaid balances and final settlements were made by drafts against the debit balances.

DRAFTS ON IMPORTER.—The absence of documentary evidence of indebtedness makes open account shipments unusually hazardous. The importer, however, may agree to produce such evidence by the **acceptance of a draft** drawn upon him by the exporter for the full amount of invoice and incidental expenses and with a due date corresponding to the original conditions of sale.

This draft, forwarded to him direct with the shipping documents which transfer ownership of the goods to him, is then returned, after acceptance, to the exporter. The acceptance of the importer has the effect of establishing his financial obligation and makes the draft readily negotiable. Although the exporter extends credit, he may at any time before maturity date of the draft obtain funds by **discounting this acceptance** at his bank.

DISADVANTAGE OF DRAFT ON IMPORTER.—The disadvantage of this method is that, as in the case of shipments on open account, the exporter makes a shipment **without any tangible security.** Until the draft is returned to him accepted, or until his bank has secured acceptance of the draft for him he has no more security than under an open account. Therefore, the majority of foreign trade transactions are consummated on a basis of documents against acceptance, or documents against payment. In either case the foreign exchange banker may play an important rôle.

DOCUMENTS AGAINST ACCEPTANCE.—In order to make certain that the possession of the goods will not pass to the customer until he has acknowl-

edged his financial obligations, the exporter may present the draft to his bank with request to secure the acceptance of the customer and to withhold the documents, which would enable the customer to obtain the goods from the transportation company, until the acceptance has been secured. This is called **"Documents against Acceptance,"** often abbreviated in correspondence as D/A.

This condition, in no way affects the length of the credit period, nor the fact that the exporter must carry the customer until the maturity of the draft. It merely provides **security for the exporter.**

ACCEPTANCE GENERALLY DEFERRED UNTIL GOODS ARE RECEIVED.—Where the distance which separates exporter and importer is great and the likelihood exists that the documents traveling by mail steamer may reach their destination long before the goods arrive, it is customary to allow the customer to **postpone his acceptance** until the goods have arrived. The purpose of this is that it might prove exceedingly embarrassing to the importer to face the payment of a draft for goods which never arrived. Acceptance of the draft would leave him no means of escape.

DOCUMENTS ATTACHED TO DRAFT.—In the case of documents against acceptance the documents in question will be, generally:

1. Bill of lading—clean or foul, straight or order.
2. Insurance certificate or policy.
3. Commercial invoice.
4. Consular invoice.
5. Miscellaneous papers.
   (a) Certificate of origin.
   (b) Anti-dumping certificate.
   (c) Inspection certificate.

BILLS OF LADING.—In the case assumed the bill of lading will be issued by the steamship company and serve as a receipt for the goods delivered to it in apparent good order. Such a bill of lading is known as **"clean."** However, if the goods are not in good order appropriate notation will be made upon the bill of lading, which thereupon becomes **"foul."** Naturally, such a document is to be avoided, if possible. It will lead to considerable difficulty, especially if the shipment is being financed by a banker under a letter of credit. A bill of lading made out direct to the consignee is known as a **"straight"** bill of lading and is **non-negotiable.** If it is made out to the order of anyone else it is an **"order"** bill of lading and becomes **negotiable** by indorsement. This form of bill of lading is imperative if the merchandise is to serve as collateral security. Usually the steamship company signs two or more copies of an order bill of lading, these constituting a **"full set"**; and a full set must be attached to a draft drawn against the shipment since any one of the set may become negotiable.

Under certain conditions it is important that the difference be noted between the **usual bill of lading,** which merely acknowledges that the goods have been received on the dock for shipment, and the "on board" bill of lading which acknowledges actual receipt on board vessel. This distinction may assume importance when the contract specifies shipment by a certain date.

INSURANCE.—When merchandise is offered as **collateral** the banker demands that it be adequately protected by insurance. The fact that ocean carriers in the bill of lading disclaim all responsibility for damage or loss except in the case of gross negligence in equipping and navigating the vessel makes it imperative to seek protection under an insurance contract. One of the docu-

ments attached to the draft is therefore an insurance policy or insurance certificate.

The conditions of sale or of a letter of credit may specify either an **insurance certificate or a policy;** or the contract may be non-committal beyond requiring adequate cover. If a policy be called for under a letter of credit it will be well to secure a policy; otherwise there may be annoying delays in securing banking accommodation because of the technical departure from the letter of the contract. Ordinarily an exporter carries an **open policy** for a limited amount covering the classes of merchandise which he ships and running for a certain period. In such a case he merely notifies the insurance company or the broker on the policy and furnishes the necessary data covering the particular shipment, such as the merchandise, amount of cover, vessel, sailing date, destination, etc.; whereupon the insurance company will furnish an insurance certificate, in duplicate, covering the shipment in question. If the certificate be made out **to the order of the shipper** it becomes **negotiable** upon endorsement, unless it is issued to the shipper upon instructions from the buyer who is effecting the insurance abroad. In the latter case the certificate is not negotiable.

INSURANCE CERTIFICATE UNDER OPEN POLICY MOST USUAL.—The certificate issued under an open policy is now more generally used than the individual policy. Some question has arisen concerning the certificate because it does not contain the terms of the parent policy. In some British courts the objection against the certificate has been sustained on these grounds. In the United States the certificate is generally accepted by the bank as evidence of adequate insurance.

BLANKET INSURANCE POLICY.—This policy describes the time and geographical limits, the kind of goods covered, and establishes a maximum limit to be covered at any one time. Under this policy it is not necessary to notify the insurer of each individual shipment.

INSURANCE BROKERS COVER NOTES OR BINDERS.—The brokers' cover note, sometimes used instead of a policy or as a temporary measure, came into use during the war, but is not looked upon as good tender by the bank.

COMMERCIAL INVOICES.—The commercial invoice must accompany the documentary draft. From it the purchaser can see how far the seller has lived up to the conditions of the **sales contract** and the banker may obtain information concerning the character and value of the merchandise offered as collateral.

Such an invoice is a much more detailed affair than the usual domestic invoice. It discloses the terms of shipment, terms of payment, name and route of steamer and amount of marine insurance. It also identifies each package as to size, weight, contents, markings and value in the currency in which payment is to be made. **Two copies** of this invoice must accompany the draft drawn against a shipment. In a few cases the commercial invoice must be **certified by a consul.**

CONSULAR INVOICE.—A consular invoice is also required in case of exports to certain countries, notably in Latin America. The forms may usually be obtained from the consul of the country of destination for a small fee. The **number of copies** which must be prepared differs but is usually three.

Such an invoice is worded in the language of the consignee's country, contains all the information in a commercial invoice and **must be certified** in this country by the foreign consul in question. For this certification another fee is charged which is sometimes quite high and in a few countries is calculated on the basis

of a percentage of the value of the goods. When this latter method is used the consular fee really has the **effect of an additional ad valorem duty** and this fee should be taken into account when quoting prices c. i. f. a foreign port, unless the buyer has agreed to pay the consular fees.

Frequently a copy of the commercial invoice or bill of lading may be certified and fulfil the same purpose. Consular fees are included in the statement of charges.

CONSULAR INVOICE BASIS OF IMPORT DUTIES.—The consular invoice is used as a basis for the calculation of the import duties. Any misstatement of the value or the character of the goods will be interpreted to have been intended as an attempt at undervaluation and may lead to difficulties for the consignee and possibly fines or even confiscation.

INVOICE SHOULD FOLLOW INSTRUCTIONS OF BUYER.—It is therefore not only necessary to be accurate and truthful in the making out of the invoices but the exporter will do well in following conscientiously any instructions he may receive from his customer. The customer is usually in a better position to know the requirements of his customs service than the exporter and the exporter will protect himself against claims on account of extra customs charges.

CERTIFICATE OF ORIGIN.—In many countries the rates of duty charged vary with the country of origin of the goods. France for example has a tariff composed of two sets of duties. The **general tariff** contains the rates applicable to all countries with which France has no special agreement. **The minimum tariff** applies to certain articles originating in countries with which France has made commercial treaties. In order to establish unquestionably the country of origin of the goods many countries require a "certificate of origin." This certificate must be attached to the document presented to the bank.

A consular invoice obviates the necessity for a "certificate of origin," but one or the other is necessary to give the importer the benefit of lower import duties under the "favored nation" clause of a treaty. A certificate merely states that the merchandise has been produced in a certain country and is entitled to existing preferential rates. A supporting oath must be made before a notary public and the certificate must be viséd by the foreign consul.

ANTI-DUMPING CERTIFICATE.—Certain countries, Canada, for example, have so-called "anti-dumping" regulations to prevent flooding of their markets with foreign merchandise brought in at prices regardless of cost of production. Under such circumstances a sworn anti-dumping certificate is required, reciting that the selling price is not less than the prevailing market price in the country of origin.

INSPECTION CERTIFICATE.—An inspection certificate may be required by the sales contract. Such a document is required as a rule in making shipments of butter, meat, and other foodstuffs. Documents of this character are issued by the Chicago Board of Trade, the New York Produce Exchange and similar organizations and **certify,** after inspection, to the **quality, quantity, character and condition of the merchandise** to be shipped. If the sales contract specifies an inspection certificate from a particular exchange, it will not be wise to substitute a certificate from some other exchange. Such technical irregularities occasionally cause much trouble and delay, especially in connection with a letter of credit.

HEALTH CERTIFICATES.—These certificates are often required for shipments of agricultural products. The certificate made out by the consul

declares that the goods are not infected but are produced where infection is not known to exist, or have been disinfected.

INSISTENCE OF BANKERS ON FULL SET OF DOCUMENTS.—Although the bank cannot and does not undertake to make any inspection of merchandise, the bank will insist that the exporter comply with all the conditions listed in the instructions received from the importer and that the various certificates be produced in proper form and indicate that the quality and quantity correspond to those in the instructions.

STATEMENT OF CHARGES.—Charges against a shipment, not included in the selling price but collectible from the consignee, are entered upon a separate record called a "Statement of Charges" and **added to the value of the shipment,** the resulting total to be paid by the buyer.

Commercial Long Bills

DRAFTS DRAWN AT TIME OF SHIPMENT.—Under normal foreign trade conditions the usual method of financing is through drafts drawn by the exporter at the time of shipment. Depending upon the **terms of credit** outlined in the sales contract these drafts may be either sight or time, in foreign or domestic currency and clean or documentary. A **sight draft** is payable upon presentation; if documents are attached for release upon payment it is known as a **documentary sight draft;** otherwise, it is a **clean sight draft.** The exporter has greater security when documents are attached to a bill, sight or time, because the importer cannot secure the documents and therefore the merchandise until he pays or accepts the draft. If a clean draft is used the importer can secure the merchandise upon arrival of the documents by mail and take care of the draft at his convenience, subject only to the pressure brought to bear upon him by the seller and the collecting bank.

A **time draft** is payable either at a specified future date or at a certain period after sight, usually the latter. It, also, may be either clean or documentary. An **exporter's time draft** will be forwarded, with or without documents attached, for the acceptance of the buyer. If the draft is of the documentary type, the documents will be released only upon the buyer's acceptance, or other satisfactory acceptance is arranged. If the draft be clean, the documents will have been forwarded by mail direct to the buyer and acceptance will be an independent act.

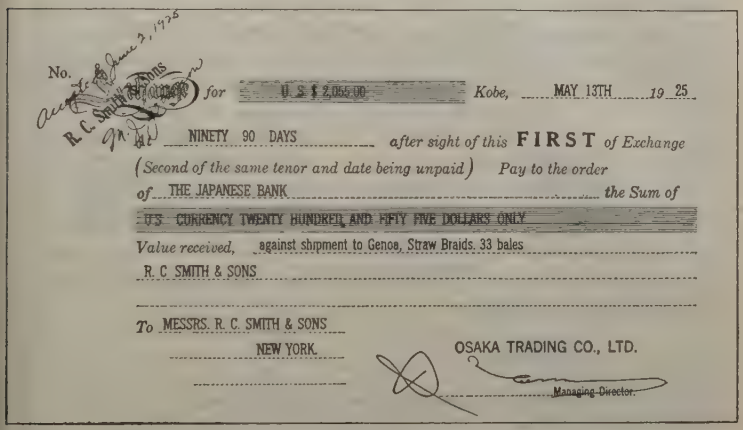
If the drafts are **drawn in dollars,** the exchange risk will rest with the buyer; if they are **drawn in the foreign currency** the risk will rest with the seller. Should the drafts be **drawn in the currency of a third country,** both the buyer and seller will be obliged to assume an exchange risk. It is, therefore, to the American seller's advantage to be able to make his price in dollars; but this can be done only in a seller's market. In a buyer's market the exporter will usually be required to quote his price in foreign currency. It is, therefore, essential that the seller understand foreign exchange if he is to conduct his foreign business effectively.

The majority of the bills of exchange arising from foreign business transactions are time drafts or **long bills** because the conditions of sale usually include a period of credit. The term "long bill" is applied to all drafts extending beyond 30 days.

The terms of sale will determine the **length of the credit period** and also the date from which the period must be counted. As already remarked, a time draft may be drawn at so many days after date, or may be drawn payable at

a definite date in the future. But neither of these forms are very common. The custom is rather to draw the bills at so many days after sight or after acceptance. It is also not unusual to include **"not until arrival of goods,"** so that the credit period begins to run from the date of arrival. In either case the actual length of the period during which the transaction must be financed by the exporter is considerably longer than the period stated in the bill.

A commercial time draft is illustrated in Fig. 4. ¶


No. 1975

for U. S. $ 2,055.00 Kobe, MAY 13TH 19 25

NINETY 90 DAYS after sight of this **FIRST** of Exchange

(Second of the same tenor and date being unpaid) Pay to the order

of THE JAPANESE BANK the Sum of

U S CURRENCY TWENTY HUNDRED AND FIFTY FIVE DOLLARS ONLY

Value received, against shipment to Genoa, Straw Braids. 33 bales

R. C SMITH & SONS

To MESSRS. R. C. SMITH & SONS

NEW YORK.

OSAKA TRADING CO., LTD.

Managing Director.

FIG. 4. Commercial Time Draft, with Acceptance

COLLECTING THROUGH THE BANK.—Once the exporter has drawn his draft he may **forward it for collection** or **sell** it to a foreign exchange bank. In the former case he must finance the transaction himself and wait for his returns; in the latter case neither the buyer nor the seller finances the shipment. The funds are furnished by the discount market. But since the draft must be sold with the exporter's endorsement, his contingent liability will exist until the draft is paid.

The **charges of the bank** for this service will consist of the commission for collection, the stamp tax and the postage. A stamp tax must be paid in most foreign countries when a bill of exchange is negotiated. The rate charged by the bank may vary from ⅛ of 1% to 2%.

DETAIL INSTRUCTIONS TO BANK NECESSARY.—The bank which undertakes this service must receive detailed instructions so that it may protect fully the interests of the drawer within the limits of the sales agreement (Fig. 5). In order to facilitate the giving of such instructions the banks have prepared printed slips which may be attached to the drafts to be collected and in which the drawer scratches out the instructions he wishes to have disregarded.

It is customary to notify the importer by letter that a draft has been drawn and will be presented through the exporter's bank. The character of the instructions actually given in each instance will be determined by the sales contract, the policy of the exporting concern, and the requirements of the moment. There are, however, certain points about which there must never be any misunderstanding between the bank and the drawer.

(Number)

New York, *January 3,* 19 *28*

THE ———— TRUST COMPANY OF NEW YORK,
140 Broadway, New York City

Dear Sirs:

We enclose ~~for collection~~ / as collateral for an advance the undermentioned draft with documents as enumerated. Instructions concerning the surrender of the documents attached to the draft will be found below

DRAFT		NUMBER	DOCUMENTS
No.	*6824*	*2*	Commercial Invoice
Date	*January 3, 1928*	*1*	Consular Invoice
Amount	*$13,429.41*	*3*	Bills of Lading
Tenor	*120 days date*	*2*	Insurance Certificate
Drawer	*Ourselves*	–	Certificate of Origin
Drawee	*Shanghai Trading Corporation*	–	Weight Certificate
City Where Payable	*Shanghai, China*	–	Declaration of Shipper

INSTRUCTIONS INDICATED BY "X"

☒ Documents against ~~Payment~~ / Acceptance

☒ Protest for Non-Payment / ~~Non-Acceptance~~

☐ Do not protest.

☒ Permit Drawee privilege inspecting merchandise before accepting draft.

☒ Hold for arrival of goods.

☒ Payable at collecting banks selling Check / ~~Cable~~ rate on New York on day of payment.

☐ Payable at Check rate on New York, remitting proceeds by cable, charges for our account.

☒ Interest to be collected at *6* % from date of issue until approximate arrival cover in New York.

☒ Allow Drawee interest at *6* % per annum for anticipated payment.

☒ All charges are for account of ~~Drawer~~ / Drawee

☒ Waive charges if refused by Drawee.

☐ In case of need refer to

Remarks: Should you designate "in case of need" give specific instructions concerning the authority extended

☒ In case of ~~Non-Acceptance~~ / Non-Payment advise immediately by ~~Mail~~ / Cable

☐ Special Instructions

Protest of items drawn on Colombia and Peru is waived.

It is understood and agreed that, having exercised due care in the selection of any correspondent to whom the above mentioned item may be sent for collection you shall not be responsible for any act, omission, default, suspension, insolvency or bankruptcy of any such correspondent or its sub-agent, or for any delay in remittance, loss in exchange or loss of said items or their proceeds during transmission or in the course of collection.

Yours truly,

FIG. 5. Instructions to Bank in Collecting Foreign Drafts

"IN CASE OF NEED" CLAUSE.—It must never be forgotten that the bank cannot exercise judgment in matters relating to the collection. The bank can only act upon specific instructions and should be extremely careful not to exceed the limits of these instructions. It is for this reason that in addition to careful instructions the name of a local representative is given whenever possible under the instructions "in case of need."

This local representative, who probably completed the sale, knows the policy of the concern and reference to him implies that he may be trusted by the bank to modify the original instructions to meet emergencies. It is, therefore, important that no "in case of need" reference be given to anyone in whose judgment and honesty the exporter does not have the utmost confidence. In order to forestall all possibilities of error, it is wise to draw up a detailed, limited power of attorney for these agents to cover matters of bills of exchange and to give the collecting bank a copy of this document.

LETTER OF DELEGATION.—At times, instead of drawing a sight draft and giving this to his bank for collection with documents attached, the exporter may prepare a letter of delegation. By this document, which does away with the drawing of a draft, the bank becomes the collection agent of the seller. The action of the bank will be determined by the instructions in the letter, but the exercise of judgment to meet difficult situations is reserved to the bank. The high stamp taxes levied upon foreign bills of exchange are thereby avoided and the seller is protected by the agreement on the part of the bank not to release the documents until all conditions have been fulfilled.

INSTRUCTIONS TO THE COLLECTING BANK.—First in importance, is the **disposition of the documents** which may be attached to the draft. The bank must know whether to hand these documents to the importer upon payment or to release them upon acceptance.

The next item in importance is whether the draft shall be presented **upon receipt or upon arrival of the goods.**

Whether **to protest** formally in case of non-payment or non-acceptance is another matter to be decided by the exporter. As a general rule it may be said that, except in case of very small bills, it will be better to protest and establish in this manner a clear case against the drawee facilitating any legal action which the importer may wish to take. On the other hand, a protested bill will usually mean a heavy expense and a customer lost forever. It is, therefore, a matter that must be carefully weighed, and where no local agent has been given power to act, it may often prove wise to leave the matter of protest to the judgment of the bank's representative.

It is also advisable to give certain definite instructions with respect to the **disposal of the goods** in case the draft is not honored. They may be returned, sold at auction, or turned over to the local representative. In order to avoid cable and warehouse expenses, the bank, in the absence of a responsible local representative of the exporter, should receive instructions to cover this contingency.

FINANCING THROUGH THE BANK.—The exporter who is not willing to allow his funds to remain tied up in foreign shipments longer than necessary may convert his draft into cash at the bank. The **bank charges interest** on the funds thus obtained. Where the exporter has ample funds, he may find it profitable to give the draft to the bank for collection and to realize the interest gain himself. He thereby gains the additional advantage that he has made no use of his bank credit and will be able to get more generous credit accommodation should a sudden emergency arise.

In some cases the bank will refuse to negotiate bills if economic or political conditions in the country of the drawee make collection uncertain. But generally speaking an export firm in good standing will find no difficulty in turning into cash a draft secured by the required documents.

The bank may **discount** (buy) the bill, **accept the bill as collateral** for a loan of less than the face value of the bill, or may allow the exporter to draw a long bill upon the bank which the bank will accept and thereby make easily negotiable in the market. The **usance** (period between date of issue and date of maturity) of this draft must be long enough so that the proceeds of the draft on the importer may be received in time to supply cover.

In any case the bank retains **recourse against the drawer,** no matter whether the draft is drawn payable to the drawer and endorsed by him to the bank or drawn payable to the bank. The credit risk rests as truly upon the exporter as if he had handed the draft to the banker for collection only.

The amount which exporters will be able to borrow upon their foreign drafts will differ according to circumstances. The bank looks to the **security** presented. This security consists of the financial responsibility of the drawer, the financial responsibility of the foreign customer, and the collateral behind the bill. The financial standing of the exporter will in every case be the most important factor.

The greatest risk for the banker lies in **discounting clean bills.** Such bills receive their security solely from the credit standing of the drawer and the drawee. **Documentary bills** which give the bank control over the documents representing actual merchandise shipped are, therefore, more easily discounted. The character of the merchandise determines its value as collateral. **Staple commodities** not subject to rapid deterioration are the most desirable. Such commodities can easily be disposed of should necessity arise. Manufactured articles requiring a special sales campaign and expert selling to be disposed of without loss, and **perishable goods** are obviously inferior collateral.

Where the credit standing of the exporter is not satisfactory, the bank may await cable notice of acceptance of the draft before making any loan. On the other hand the practice is not uncommon in Europe for the banks to arrange advances or to accept drafts on the basis of open account shipments. This is never done except for shippers of the highest credit standing.

LETTER OF HYPOTHECATION.—The draft will be made out either in favor of the bank or order, or may read **"to the order of ourselves."** In the latter case the endorsement of the exporter is necessary to make the instrument acceptable to the bank. The shipping documents will ordinarily be endorsed in blank or endorsed to the bank. In order to establish above dispute the legal right of the negotiating bank in the goods which the documents represent, it is customary to execute **a letter or certificate of hypothecation.** By means of this document the exporter declares:

1. That he will deliver to the bank all necessary documents.
2. That he will take out adequate insurance in the name of the bank, or that the bank may cover itself if the shipper fails to obtain satisfactory coverage. All losses not covered by the policy are to be paid by the exporter.
3. The bank is instructed under what conditions to deliver the documents to the buyer and is usually given the right to make partial delivery if circumstances make this desirable.
4. The exporter instructs the bank what action to take in case of non-

acceptance or non-payment and agrees to indemnify the bank for all costs and to pay the amount of the draft upon first notice of protest.

5. Without in any way releasing the exporter of his liability the bank is given wide power with respect to the disposal of the goods in case sale is necessary through failure on the part of the importer to live up to his obligations.
6. The bank reserves the right to call for additional collateral when there is any danger of a loss.

DETERMINING SELLING PRICE IN DOLLARS.—The manner in which the exporter determines his selling price and the amount for which his draft must be drawn, whether in dollars or foreign currency, will now be examined.

Illustration: Assume a sale c. i. f. Latin American port, of merchandise from which the exporter would be content to receive $10,000 in New York at the time of the sale. If the draft is to be drawn in dollars the exporter will make his computation as follows, after ascertaining freight and insurance charges, the bank rate for discounting this type of draft and bank collection charges:

Cash value of shipment in New York	$10,000.00
Freight to destination	1,450.00
Insurance	50.00
60 days' interest at 6% on face amount of draft	116.45
Collection charges, ¼% on face amount of draft	29.12
Face amount of draft	$11,645.57

It is assumed here that 60 days will elapse before funds collected will be returned to New York. The bank's charges in this case amount to 1¼% of the face amount of the draft; $11,500 therefore represents 98¾% of the amount for which the draft should be drawn.

DISCOUNTING DRAFT.—In accordance with previous arrangements the exporter will present a draft for this amount, in duplicate, with all necessary documents attached, to the bank which has agreed to discount it. The bank will discount the draft as outlined above and advance to the exporter $11,500, which represents the value of the merchandise to him plus freight and insurance charges incurred. However, the **exporter's contingent liability** as drawer and endorser will continue until the draft is paid by the drawee.

HANDLING OF DRAFT BY BANK.—The discounting bank will immediately **forward the draft,** with documents, to its appropriate Latin American correspondent for collection. Upon arrival at destination the draft will be presented to the buyer and the documents will be released upon payment, which may be effected in one of two ways. Either the drawee will be obliged to enter the exchange market and purchase sight dollar exchange equal to the face amount of the draft; or, if the draft contains the so-called **"exchange clause,"** the buyer will discharge his obligation by paying to the collecting bank an amount of local funds sufficient to buy, at the collecting bank's rate for the day, a sight draft on New York for the face amount of the bill. In the former case the Latin American correspondent remits the dollar draft direct to New York to reimburse the bank which has financed the shipment. In the latter case, transfer of the funds between the banks will usually be accomplished by bookkeeping entries only. If the time required for collection and remittance should exceed the estimated period of 60 days, the exporter will generally be required to meet the resulting interest loss.

DRAFTS DRAWN IN FOREIGN CURRENCY.—Assume that the same merchandise is to be sold in Great Britain at a **price fixed in sterling,** documents

against buyer's acceptance of a 60-day draft. For the sake of simplicity assume further that such a bill will be readily discountable in the London market. At what price must the sale be made in sterling? The exporter must first ascertain from the banker to whom he proposes to sell the bill the rate at which the draft is to be sold; and on the basis of this rate the draft will be drawn in sterling. As outlined in previous pages, the price for such a bill will be based on the rate for demand exchange and computed as follows:

Rate for sight exchange on London		$4.8525
Deduct:		
Interest for 63 days (including British customary 3 days' grace) at London discount rate to arrive	$.0374	
British stamp tax	.0024	
London bank's commission and New York bank's profit	.006	.0458
New York price for 60-day draft		$4.8067

A 60-day sterling draft drawn for the proper amount computed on the basis of the foregoing rate and sold under endorsement to the New York bank at the rate quoted, will net the exporter the desired amount in dollars. The seller delivers the draft in duplicate, with all necessary documents attached, to the buying bank.

BANK'S HANDLING OF DRAFT.—The New York bank now forwards the draft with documents to its London correspondent for acceptance and discount at the agreed rate. Upon acceptance of the draft the documents are released and the accepted bill becomes "clean." Following the bill's discount the net amount realized in sterling is added to the New York bank's supply of available sterling exchange. The New York bank may have already sold its own demand exchange for this amount as an offset. Or it may sell other types of exchange, depending upon market demands and other factors.

DOCUMENTS AGAINST PAYMENT.—The exporter may consider that he has done all that he is justified in doing if he undertakes to finance the transaction until the goods are delivered on the foreign shore. In this case he will demand payment upon presentation of the documents and will hand a sight draft with documents attached to his bank with instructions to collect this draft on the basis of "Documents against Payment" (D/P).

Here again he may instruct the bank to hold **for arrival of goods.** To insist upon payment on arrival of the documents, especially where it concerns shipments made from interior points on through bills of lading, would often result in a dissatisfied customer. Any delay, even that resulting from inefficiency and carelessness in routing on the part of the seller, will place a financial burden upon the importer who is forced to tie up his capital before the arrival of the goods.

PAYMENT ANTICIPATED.—In the case of a documentary payment bill it is customary to allow the buyer to **anticipate payment,** if he so desires, and upon retirement of the bill before its maturity to receive an **interest rebate** at a rate generally fixed in reference to prevailing market rates. Such bills are not readily discountable in the London market because their nominal maturity does not necessarily determine their date of payment. Hence, the New York bank which purchases them cannot sell its own demand exchange against them unless it secures loans in London; or the New York bank may market its own long bills on its London correspondent using these documentary payment bills as collateral security. Otherwise the purchasing bank must content

itself with selling exchange for future delivery or with investing in the bills until maturity.

METHODS OF REMITTANCE USED BY DRAWEE.—Depending upon credit arrangements effected, the exporter may draw upon the importer in dollars, in the importer's currency or in the currency of a third country. The importer may remit either by cable transfer, sight or time exchange. The form of remittance to be used will determine the period of the credit and therefore the amount of interest to be included in the draft. The longer the period, the greater the amount of the draft. But this difference is offset by the lesser rate at which the longer exchange can be purchased.

REMITTANCE BY SIGHT DRAFT.—Suppose the importer is to remit by purchase of a sight draft at the maturity of the bill drawn. If the bill is **drawn in dollars**, the importer may tender the collecting bank a dollar sight draft bought in the open market. If the exchange clause is included in the draft, the drawee must pay to the collecting bank in local currency a sum sufficient, at the bank's rate for the day, to purchase a dollar sight draft of the requisite amount. If the bill be drawn **in currency of a third country**, the importer must purchase a sight draft in such currency; or comply with the requirements of the exchange clause if the latter has been inserted in the draft. The collecting bank forwards the draft to New York or instructs the New York bank to charge its account for the proper amount.

REMITTANCE BY CABLE.—The importer may be required to remit by cable transfer. The **net cost** to the importer will be **the same** as though he were allowed to remit by sight or time exchange because the difference in the relative rates for the various types of exchange is offset by the difference in the amount for which the draft is drawn. Where cable transfer remittance is required, at maturity of the draft, the importer will purchase a cable transfer in the currency designated in the bill; or he will turn over the proper amount of local currency if the exchange clause governs.

REMITTANCE BY BANKER'S TIME BILL.—In some cases remittance is effected by a banker's time bill. Under such circumstances the importer may discharge his obligation at the maturity of the draft by tendering to the collecting bank a banker's time bill of the required tenor. The collecting bank will forward this bill to its correspondent, whereupon it will be presented for acceptance and subsequently discounted or held until maturity. The exchange clause may also be used in connection with this type of exchange.

BILLS DRAWN WITH INTEREST.—In the discussion so far it has been assumed that the drafts drawn by the exporter were non-interest bearing. However, in certain classes of trade with the far east it is customary to draw bills of exchange bearing interest at an agreed rate, generally 6%. In case of an interest-bearing draft the exporter draws only for the selling price of his merchandise plus expenses and usually receives the face amount of his draft upon its sale. The **amount of interest and collection charges** are added by the collecting bank and paid by the importer. The interest period is normally the time estimated to elapse from the date of the draft to the probable receipt of funds in New York or London, depending upon the currency used. If only a portion of such time is contemplated by the interest clause, the balance of the interest will already have been included in the face amount of the draft.

COLONIAL CLAUSE.—In trade with South Africa and Australasia, which use the pound sterling as their monetary unit, it is the custom to include in sterling drafts the following so-called "Colonial clause": "Payable with

exchange (British and Colonial stamps added) at the current rate in London for negotiating bills on the Colonies." The net effect of this clause is to make the bill **equivalent to sight exchange on London.** Accordingly, the exporter bases his selling price on the latter rate. At maturity of the bill, the importer meets it by paying not only its face amount in local sterling plus stamp taxes but also a further sum determined by the day's rate in London for negotiating such bills.

CASH WITH ORDER.—If the exporter refuses to carry his customer he may demand cash with order. Such terms are **exceptional** in foreign trade. The exporter receives his money before he has packed the goods, often before he has manufactured them. The importer not only finances the entire transaction but is paying his money without any security except the credit standing of the exporting firm. Should the order not be filled, or the goods be unduly delayed so as to arrive in a dull market, or be of inferior quality, or not according to the samples submitted, there remains no other way open for the importer than to bring legal action on the basis of the sales contract unless the exporter voluntarily makes adjustment. These terms are, therefore, wholly one sided and are not often used.

Where this method of selling is used the importer would probably purchase from his bank a draft upon the city of the exporter, upon New York, or if this meets with the seller's approval, upon London. The risk of changes in the foreign exchange rate is therefore added to the other expenses and risks of the importer.

FINANCING WITH LETTERS OF CREDIT.—The foregoing methods of financing foreign trade, excepting "cash with order," presuppose that the foreign buyer has a satisfactory credit rating and that the exporter either has sufficient capital to extend lengthy credits or can readily negotiate his drafts with a bank. If such is not the case it is very probable that the transactions will be completed by means of a commercial letter of credit. Here the foreign exchange banker performs another function. The buyer may secure a letter of credit from his own bank under which the exporter can draw his drafts; or, through his own bank, the importer may secure a letter of credit from a bank in this country against which the exporter may draw. The circumstances of the individual case will determine. In either case, a letter of credit arrangement will be greatly to the advantage of the seller. The credit of a bank will be substituted for that of the importer and the exporter will find a ready market for his drafts. In addition, a draft drawn on a bank will command a **higher price** than one drawn on a commercial house.

THE DURATION OF THE CREDIT.—Each letter of credit has an **expiration date.** In the absence of special instructions or amendments the bank will refuse to negotiate drafts after that date. The clause indicating the date of expiration is not always of the same form.

"Available until"; "draft under this credit must be drawn and negotiated prior to"; "bills of lading must be dated not later than ..... and drafts must be negotiated not later than ..... —" are only some of the many clauses which may be used.

The exporter must read carefully the terms of the credit in order to avoid surprises in the future. As a rule the date refers to the time when the draft and documents must be placed in the hands of the bank in the exporter's country.

CHARACTERISTICS OF COMMERCIAL LETTER OF CREDIT.—A letter of credit may be any one of **several types** but whatever the type will generally cover the following points:

LETTER OF CREDIT.

No. _____

_____ New York, _____

_____

_____

You are hereby authorized to value on

_____

at _____

for account of _____

for any sum or sums not exceeding in all _____

_____

for _____

merchandise to be shipped to _____

_____

The bills of lading to be issued to order

_____

and consular invoice and _____

bill of lading to be forwarded to _____

Insurance fully covering the merchandise to be effected by _____

_____ with loss made payable to _____

The shipments must be completed on or before _____

and the drafts drawn on or before _____

The drafts are to be advised to drawees and must be accompanied by

_____

and all the remaining bills of lading with abstract of invoice (which if attached to the drafts are to be surrendered against acceptance).

And we hereby agree with the drawers, endorsers and bona-fide holders of bills drawn in compliance with the terms of this credit, that the same shall be duly honored on presentation by above named drawees.

Drafts under this credit to contain the clause "drawn under credit No. _____ of _____ dated New York _____ and to be noted on the back hereof at the time of negotiation.

FIG. 6. Commercial Letter of Credit

1. It will embody the conditions of the credit arranged between buyer and seller and will enable the bank purchasing a draft drawn thereunder to ascertain if these conditions have been complied with.
2. It will authorize the exporter to draw upon the bank of issue or its correspondent and will contain the promise of that bank to honor drafts drawn thereunder in accordance with instructions and conditions agreed upon.

Before a letter of credit is issued **an agreement** is entered into between the importer and his bank covering the following points:

1. The buyer must agree to put the bank in funds a certain period in advance of the maturity of any draft drawn by the exporter under the credit. In addition, he must pay the bank's commission.
2. It is agreed that the bank is the owner of the merchandise and documents until the importer has met all of his obligations to the bank.
3. It is agreed that the bank shall have the right to demand additional security.
4. The agreement limits the bank's liability as to the validity of the drafts or documents and as to any mistakes by the exporter or the banks handling the drafts.

The form of the letter of credit usually appears upon the reverse side of the agreement. Figs. 6, 7, and 8 show the form of a typical letter of credit, an agreement to reimburse, and an application for a letter of credit.

COMMERCIAL LETTER OF CREDIT AGREEMENT

A. Banker & Co.,
New York City.

Dear Sirs:

In consideration of your issuing at our request your commercial Letter of Credit No. ..... (herein called The Credit) the terms of which appear on the reverse side hereof and are hereby approved by us, we hereby agree as follows:

1. (a) To provide you in New York not less than ..... days before maturity of drafts drawn under this Credit with United States gold coin at the rate of exchange fixed by you sufficient to meet payment of same at maturity; (b) in the case of sight drafts, to pay you upon demand United States gold coin sufficient to reimburse you; and (c) to pay you a commission at the rate of ..... of the amount of the Credit used, and all sundry charges and expenses paid or incurred by you in connection therewith, together with interest at ..... per annum where chargeable.

2. You may receive and accept as "Bills of Lading" under the Credit any documents issued or purporting to be issued by or on behalf of any carrier which acknowledge receipt of property for transportation, whatever may be the specific provisions of such documents. We hereby guarantee that all Bills of Lading, Invoices and/or other documents forwarded to ..... under the above Letter of Credit shall be genuine. We agree to keep the property adequately and satisfactorily covered by insurance to be effected by the seller or by us in companies satisfactory to you, and we hereby assign the policies or certificates of insurance covering the property, to you and agree upon demand to execute any necessary documents in order to make said assignment effective, and we agree to make the loss or adjustment, if any, payable to you at your option, and to furnish you if demanded, with evidence of acceptance by the insurers of such assignment.

3. The users of the Credit shall be deemed our agents and we assume all risks of their acts and/or omissions. Neither you nor your correspondents shall be responsible: for the existence, character, quality, quantity, condition, packing, value, or delivery of the property purporting to be represented by documents; for any difference in character, quality, quantity, condition or value of the property from that expressed in documents; for the validity, sufficiency, or genuineness of documents, even if such documents should in fact

prove to be in any or all respects invalid, insufficient, fraudulent or forged; for any breach of contract between the shippers or vendors and ourselves; for errors, losses, omissions, interruptions, mutilations or delays in the transmission of any messages or documents relative to this Credit, by mail, cable, telegraph, wireless or otherwise, whether or not they be in cipher; for any error, neglect, default, delay or omission of any of your correspondents or of any agency employed by you in connection with this Credit; nor for delay in giving or failure to give notice of arrival or any other notice.

4. We agree that in the event of any extension of the time of shipment or of the maturity, dating or time for presentation of drafts, acceptances or documents, or in the event of any other modification of the terms of credit, at our request, or in the event of any increase in the amount of the credit at our request, all the terms and conditions of this agreement shall be binding upon us with regard to the credit so increased or otherwise modified, to drafts, documents and property covered thereby, and to any action taken by you or your correspondents in accordance with such extension, increase or other modification.

5. We hereby recognize and admit your ownership in and unqualified right to the possession and disposal of all property shipped in connection with this Credit or in any way relative thereto or to the drafts drawn thereunder whether or not released to us on trust or bailee receipt, and we hereby vest you with the title to all of said property and to the Bills of Lading thereof, the documents of insurance thereon, and the whole of the proceeds thereof, until the payment to you of the Bills above referred to and of all sums that may be due or may become due to you from the undersigned on said Bills or otherwise, and upon our failure to carry out any term or condition of this agreement to be performed by us, or upon the filing of any petition in bankruptcy by or against us, or upon any application for the appointment of a receiver of our property, all our obligations to you howsoever arising shall be and become immediately due and payable at your option in United States gold coin without demand or notice, notwithstanding any credit or time allowed to us or contained in any instrument evidencing any of our obligations or otherwise, and you are hereby given authority immediately to sell or dispose of the whole or any part of said property solely at your discretion for your reimbursement as aforesaid, at public or private sale, at any time or times and at any place or places, upon such terms and conditions as you may deem proper, without demand or notice to us and without advertising, and to charge all your expenses in connection with said disposal of sale of said property against the proceeds of any such disposition or sale thereof, with the right upon your part in case of public sale thereof to purchase the same or any part thereof free from any right of redemption on our part, which right is hereby waived and released, and we agree to remain liable to you for any deficit which we agree to pay you on demand. The receipt by you or any of your correspondents at any time of other security of whatsoever nature, including cash, shall not be deemed a waiver of any of your rights or powers herein recognized.

6. If this agreement is signed by one individual, the terms "we," "our," "us," shall be read throughout as "I," "my," "me."

Very truly yours,

....

Fig. 7. Commercial Letter of Credit Agreement

TYPES OF CREDITS.—The various types of credits may be classified as follows:

1. Revocable or irrevocable
2. Confirmed
3. Circular or specially advised
4. Negotiation or straight
5. Revolving

In the order of the security they offer, credits rank as follows:

1. The irrevocable—confirmed
2. The irrevocable—unconfirmed
3. The revocable—unconfirmed

Guaranty Trust Company of New York

APPLICATION FOR LETTER OF CREDIT

New York July 1, 1925.

Guaranty Trust Company of New York,
Foreign Department, Commercial Credits Div.,
New York City, N. Y.

Please issue an Irrevocable Letter of Credit and transmit same by ~~cable~~ mail

For account of ourselves

In favor of Guarani Mendoza & Co. Santos, Brazil.

Amount $26,000 Available by drafts at 90 days sight
(Sight, thirty, sixty, or ninety days)

against documents as follows:

Bills of Lading

Bills of Lading reading "Received for Shipment" or otherwise worded to same effect are acceptable against this credit.

Invoice

Consular Invoice

other documents { .

evidencing Full % invoice value of ~~C. I. F.~~, C. & F., ~~F. O. B., F. A. S.~~ Shipments
(cross out all but one)

1000 (One Thousand) Bags Coffee during July

from Santos, Brazil to New York

Drafts to be negotiated on or before August 1, 1925

Marine and War Risk Insurance to be effected by ourselves
(Shipper or Purchaser)

Partial shipments are to be permitted.

Special Instructions None

The Letter of Credit is subject to your usual terms and conditions, and in consideration of the issuance thereof we agree to reimburse you on demand, and we hereby authorize you to charge our account with you with any and all amounts for which you are liable thereunder, plus your commission and charges.

Neither you nor your correspondents shall be responsible for the description, quantity, quality or value of the merchandise shipped under this credit, nor for the correctness, genuineness or validity of the documents, nor for delay or deviation from instructions in regard to shipment, nor for any other cause beyond your control.

The Guaranty Trust Company of New York does not assume responsibility for any inaccuracy, interruption, or delay in the transmission or delivery of messages by cable and/or by mail.

James Williams & Co.
(To be signed by properly authorized official)

FIG. 8. Application for Letter of Credit

Some confusion still exists with respect to these terms and it is sometimes thought that irrevocable and confirmed are synonymous. The above interpretation of the terms is the one now generally accepted.

REVOCABLE AND IRREVOCABLE LETTER OF CREDIT.—If the credit is **irrevocable,** it is good for a stated period and cannot be cancelled by the bank without the consent of the beneficiary. A **revocable letter of credit,** on the other hand, although issued for a stated period, may be cancelled by the bank at any time with due notice to the exporter. Some letters of credit may fall into both classes; that is, they may be revocable up to a certain stage of the transaction after which they become irrevocable. In point of security offered the latter type is to be preferred.

As a rule, an exporter will be wise in refusing to act on the basis of a revocable credit. The banks do not favor revocable letters of credit, and some banks refuse to issue them for the reason that **disputes and litigation resulting from sudden cancellation** reflect unfavorably upon the bank which issued them.

CONFIRMED LETTER OF CREDIT.—There is another type which offers even greater security, known as the confirmed letter of credit. Suppose that the exporter requires that the buyer furnish a credit of this type; the buyer's bank, upon request, informs its New York correspondent of the terms of the credit issued and requests the latter to confirm the credit to the beneficiary. The New York banker thereupon transmits to the exporter a letter of confirmation embodying the terms of the credit confirmed. This confirmation binds the bank to negotiate drafts drawn according to the conditions of the credit and not only gives the exporter additional security but also will make his draft more readily negotiable in the exporter's country. An irrevocable credit may be confirmed or unconfirmed. A "revocable" credit will never be "confirmed," for obviously the bank in the exporter's country will not assume responsibilities exceeding those of the issuing bank.

CIRCULAR LETTER OF CREDIT.—A circular letter of credit is one sent direct to the beneficiary by the importer or the issuing bank, under which the exporter is at liberty to negotiate his drafts where he can. But if the letter of credit is not sent to the beneficiary, and the latter is merely notified of its terms by a letter of advice from the New York correspondent of the issuing bank, we have a credit of the type known as **"specially advised."** Under such a credit, if it be also of the **"negotiation" type,** the exporter may dispose of his drafts to best advantage; if the credit **be "straight,"** the beneficiary must negotiate his drafts through the advising bank. In the case of negotiation credits it is a general requirement that the amount of each draft purchased be entered on the back of the credit or letter of advice by the buying bank and that the letter of credit be surrendered with the draft which exhausts the credit. This precaution is taken to prevent the negotiation of drafts in excess of the amount of the credit.

REVOLVING CREDIT.—A revolving credit is one which, when exhausted, is **automatically renewed;** this renewal may take place a specified number of times or may continue until the credit is terminated by the parties thereto. Where the business between exporter and importer is continuous it is possible to establish such a credit which will automatically become available again for a new transaction after the old transaction has been liquidated. The letter of credit then serves to establish the maximum amount of the transactions which the bank is willing to finance at any one time. It may also be that the letter allows the drawing of a draft of a given size at prescribed intervals, corresponding

to the delivery times of partial shipments of a large order or of periodically forwarded goods.

AUTHORITY TO PURCHASE AND AUTHORITY TO DRAW.—An "authority to purchase" is not a substitute for a letter of credit but in some cases is issued to provide the exporter with **a market for his drafts.** Under the authority to purchase the exporter is instructed to draw on the importer. A draft drawn upon a foreign importer of limited or unknown credit standing is not readily discounted advantageously, and the exporter must depend largely upon his own credit to negotiate it. In order to facilitate the negotiation of these bills and to throw the burden of the financing upon the importer, the authority to purchase is used.

The authority is issued at the importer's request by his bank with the exporter as beneficiary, and under it the issuing bank, through its agents, purchases the drafts at the point of origin. In order to procure this service from his bank the importer must sign a contract known as the **"authority to draw."** This document, which is really a **letter of guaranty,** describes the conditions under which the exporter may draw, names the amount and binds the importer to accept the drafts. It also absolves the bank from liability and pledges the documents and merchandise as collateral security.

The authority to purchase may be **revocable or irrevocable** and the negotiating bank may merely send an advice of its agreement to negotiate or may in some cases confirm the authority. Unless the authority specifically states that drafts **"without recourse"** may be drawn the drafts carry full recourse to the drawers.

THE EXPORT LETTER OF CREDIT.—This term is often applied to a letter of credit when the issuing bank does not communicate direct with the exporter but with a corresponding bank in the exporter's country, and requests the correspondent to open the credit and to issue a letter of credit. The exporter then receives his notice from a local bank and deals only with the local bank. In this case the draft is presented to and honored by the bank issuing the credit and the liability of the exporter ceases. This is an advantage from the point of view of the exporter over an import letter of credit issued by the buyer's bank.

TERMS OF LETTER OF CREDIT.—As already stated, letters of credit may be issued either in **dollars or foreign currency.** If the credit be issued in dollars the buyer must assume the exchange risk; if in foreign currency the seller must assume this risk. In either case, however, the risk may be avoided by providing, at the inception of the transaction, for purchase or sale of the appropriate amount and type of exchange. Moreover, the credit may contemplate either **sight or time drafts.** Sight drafts will be paid upon presentation to the bank issuing the credit; time drafts will be duly accepted and paid at maturity. The particular kind of draft used makes no real difference to the exporter since his selling price includes the amount of interest accruing until the maturity of the draft in order to offset the discount taken by the bank which negotiates the bill.

DOLLAR DRAFTS AGAINST EXPORTS.—Consider the case of an export financed by a letter of credit made available in New York. The foreign bank will request its New York correspondent to advise the exporter of the credit and its terms and to confirm it to him. Drafts are to be drawn at 60 days sight. The exporter will draw his bills for an amount sufficient to net him the value of the goods sold plus expenses of shipment, etc. The amount of the draft will, therefore, be governed by the rate of discount. Suppose the exporter

wishes to realize $10,000, and his draft, after acceptance by the bank, can be discounted at 4%. $10,000 represents 99⅓% of the amount for which the bill must be drawn; the face amount of the draft will be $10,067.11, which, when discounted for 60 days at 4%, will yield $10,000 (assuming 360 days to the year). The bank which discounts the acceptance may hold it until maturity or may sell it in the open market. At its maturity the acceptance will be met by funds furnished by the importer who may pay in one of several ways. He may tender to the bank dollar time exchange equal to the amount of the acceptance and due in New York at the latter's maturity. He may furnish the bank with dollar sight exchange to reach New York at maturity of the draft. Or he may delay remittance until a few days before maturity of his obligation and furnish funds by purchase of a dollar cable. Regardless of the type of remittance selected if the exchange clause has been embodied in the bill the importer may meet his obligation by paying to his bank a sum in local currency sufficient to purchase the particular type of remittance at the bank's rate for the day.

FOREIGN CURRENCY DRAFTS.—Exports are often financed under letters of credit specifying that drafts shall be drawn in a foreign currency. Where this is true the exporter must quote a selling price which gives effect to the rate at which the foreign currency bill can be disposed of.

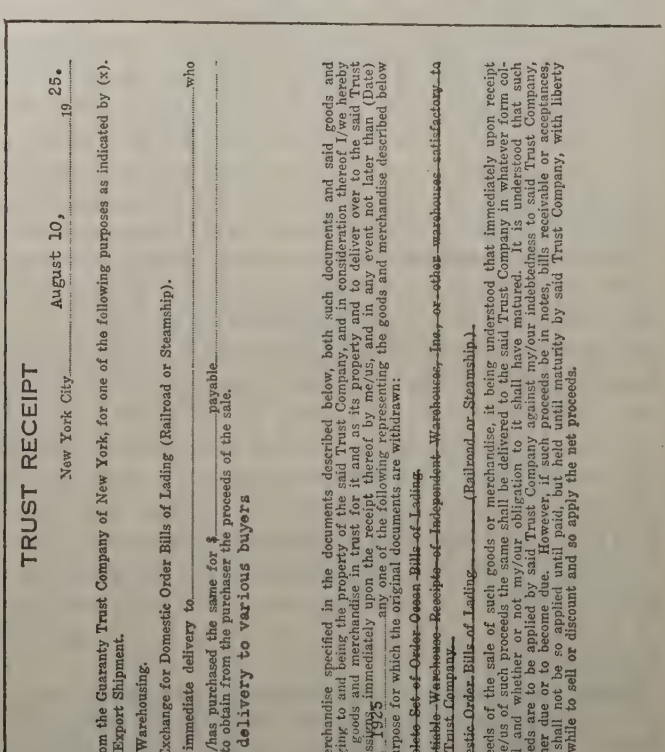
It has already been shown that the exporter's bank will pay the exporter the face value of the draft minus the discount. The amount of this discount will depend upon the amount which can be realized upon the draft after it has been accepted by the importer's bank. In other words, it depends upon the condition of the acceptance market in the importer's country. It may for this reason be often advantageous to both importer and exporter to have the credit established not in the importer's country but in a more active acceptance market. This will most likely be England, and it gives rise to the sterling letter of credit. The importer's bank notifies the exporter and instructs him to draw on a London bank. The London bank is also notified of the transaction by receiving a copy of the letter of credit from the importer's bank.

The exporter's bank discounts the draft but usually notifies the importer's bank of the fact and forwards to the latter a set of the shipping documents for the purpose of record. The London bank honors the draft presented to it by the correspondent of the exporter's bank and forwards the negotiable documents to the importer's bank.

FINANCING IMPORTS UNDER LETTERS OF CREDIT.—The methods of financing imports are no different from those described under the financing of exports. The position of the American merchant is now reversed and the same methods are open to him which are open to the foreign importer. Import letters of credit may be drawn in the currency of the country from which the goods are purchased. Trade customs, however, may change this or the exchange situation may be such that import letters of credit may be drawn in some other currency. Many commodities such as coffee and cocoa from Brazil, hides from Argentina or raw silk from China and Japan are bought on a dollar basis and the import letter of credit and drafts on New York banks are drawn in dollars. Some commodities such as wool from Australia and South Africa, furs from Australia, and rubber from the Straits Settlements are purchased on a sterling basis and the letters of credit expressed in sterling and drafts drawn on London banks.

In the case of a credit in foreign currency, the importer should **cover his exchange position** by purchasing a forward contract of exchange as a protection against an advance in exchange rates before the draft arrives for collection.

DOLLAR DRAFTS AGAINST IMPORTS.—However, comparatively few drafts in foreign currency are drawn at the present time for the purpose of financing imports into the United States under letters of credit. The position



TRUST RECEIPT

New York City, August 10, 1925.

Received from the Guaranty Trust Company of New York, for one of the following purposes as indicated by (x).

☐ 1. For Export Shipment.
☐ 2. For Warehousing.
☐ 3. To Exchange for Domestic Order Bills of Lading (Railroad or Steamship).
☐ 4. For immediate delivery to ..... who or for immediate delivery to ..... payable ..... and to obtain from the purchaser the proceeds of the sale.
☒ 5. For delivery to various buyers

the goods and merchandise specified in the documents described below, both such documents and said goods and merchandise belonging to and being the property of the said Trust Company, and in consideration thereof I/we hereby agree to hold said goods and merchandise in trust for it and as its property and to deliver over to the said Trust Company or its assigns immediately upon the receipt thereof by me/us, and in any event not later than (Date) September 1, 1925 ..... any one of the following representing the goods and merchandise described below according to the purpose for which the original documents are withdrawn:

1. ~~Complete Set of Order Ocean Bills of Lading.~~
2. ~~Negotiable Warehouse Receipts of Independent Warehouses, Inc., or other warehouses satisfactory to said Trust Company.~~
3. ~~Domestic Order Bills of Lading~~ ..... (Railroad or Steamship).
4. Proceeds of the sale of such goods or merchandise, it being understood that immediately upon receipt by me/us of such proceeds the same shall be delivered to the said Trust Company in whatever form collected and whether or not my/our obligation to it shall have matured. It is understood that such proceeds are to be applied by said Trust Company against my/our indebtedness to said Trust Company, whether due or to become due. However, if such proceeds be in notes, bills receivable or acceptances, they shall not be so applied until paid, but held until maturity by said Trust Company, with liberty meanwhile to sell or discount and so apply the net proceeds.
5.

of the dollar in the exchange markets of the world is, without much doubt responsible for this condition.

American imports, therefore, are frequently financed under letters of credit in dollars opened by American banks permitting foreign exporters to draw on

the issuing bank. Because of the demand for dollar exchange these credits are **usually of the circular type.** The foreign exporter ships his goods, draws a draft for the proper amount and, armed with his letter of credit and documents,

The delivery herein is temporarily made to me/us for convenience only, without novation, or without giving me/us any title to the documents or the goods and merchandise they represent, except as trustee and agent for the said Trust Company for the purposes herein indicated.

Said Trust Company may at any time cancel this trust and take possession of said goods and merchandise or any of said documents or of the proceeds of the same wherever said goods and merchandise and documents or the proceeds thereof may then be found or located, and in the event of suspension, proceedings in bankruptcy or assignment for the benefit of creditors on my/our part or of the non-fulfillment of any obligation or of the non-payment at maturity of any indebtedness on my/our part to said Trust Company then in any such case, all obligations, acceptances, indebtedness and liabilities whatsoever shall forthwith mature and become due and payable.

The said goods and merchandise shall at all times at my/our expense be fully insured against loss by fire and any other risk that said goods and merchandise may be subject to. On demand, the insurance policies or certificates of acceptable character shall be delivered with the Guaranty Trust Company of New York, the said Trust Company to be designated in the Policies as the Assured in the following form: Assured: The Guaranty Trust Company of New York for account of whom it may concern. Loss to be adjusted with ..... and payable to the Guaranty Trust Company of New York for account of whom it may concern.

The undersigned in further assurance, agree that insofar as the undersigned may make entries or records of transactions herein set forth or provided for in the books of account of the undersigned, such entries shall definitely indicate that said merchandise and documents and the proceeds thereof are the property of said Trust Company.

Receipt of a copy of this Trust Receipt is herewith acknowledged.

DESCRIPTION OF DOCUMENT	QUANTITY	GOODS AND MERCHANDISE (GIVE MARKS AND NUMBERS)	VALUE
2 Bills of Lading	1000 bags	Coffee J. W. Co. B-1/8	$25,823
1 Consular Invoice			
1 Commercial Invoice		Under L/C No. 890524	

Signed James Williams & Co.

FIG. 9. Trust Receipt

offers his bill for sale in the open market. The purchasing bank forwards the bill with documents to its New York correspondent to secure acceptance and possibly for subsequent discount to offset a sale of its own exchange. The issuing bank accepts the draft and secures the documents which are usually

released to the American importer under a trust receipt. Generally a day or two before maturity of the acceptance the importer will place his bank in funds sufficient to meet the obligation.

THE LETTER OF LIEN AND THE TRUST RECEIPT.—The importer may be in a much better position to pay the draft when due if he has been able to turn over some or all of the merchandise, before the due date. A strict interpretation of the D/P clause prevents him from obtaining possession of the goods until payment has taken place and may, therefore, really lessen the probability of a successful liquidation rather than promote it.

There are several ways open to the bank to aid the importer without jeopardizing the security of the draft. The bank may release to the importer such portion of the shipment as the importer succeeds in selling, the proceeds to be paid over to the bank which allows deliveries to be made direct to the importer's customers. In this manner the draft will be paid in instalments and upon payment in full the remaining goods will be released.

There are two objections to this practice. One is from the side of the bank. The importer will withdraw only such goods or such portion of the goods as he can readily dispose of, possibly leaving the bank with slow moving goods which form doubtful collateral. From the side of the importer the objection may be made that the exporter's bank secures full information of his selling terms and customers.

More usual, and adapted not only to manufactured goods but also to raw materials and other manufacturers' requirements is the use of the **trust receipt** (Fig. 9) **or the letter of lien.** The bank releases all the goods to the importer prior to the payment of the draft upon the execution of a document in which the importer declares that the goods are the property of the bank and are by him received "to hold said goods in trust for them." The importer agrees to turn over all proceeds from sales to the bank until the accepted bill has been liquidated in full. The goods must be so stored and handled that they may at all times be identified, since otherwise the special claim of the bank in them might not easily be established. The importer carries the financial burden of the transaction.

Travelers' Letters of Credit and Checks

GENERAL CHARACTER.—The traveler's letter of credit is a convenient medium whereby tourists may keep themselves in funds while abroad. They are issued in dollars or foreign currency by New York banks or under joint account arrangements by New York banks and their foreign correspondents. They are usually limited both as to life and amount. Fig. 10 illustrates a traveler's letter of credit issued in dollars under a joint account arrangement between a New York bank and its London correspondent under which dollar drafts are to be drawn on the New York bank. At the time of issue of such a credit the beneficiary is furnished with a **list of the issuing bank's foreign correspondents** who will purchase at the prevailing rate for sight exchange drafts drawn in the currency and against the bank named in the credit. The letter of credit and the list of correspondents must be both exhibited before a correspondent bank will purchase a draft drawn under the credit. A comparison of the beneficiary's signatures as appearing in the list of correspondents and on the draft drawn completes identification; and a comparison of the bank officers' signatures as appearing in both parts of the credit with those on file with the correspondent establishes the validity of the credit. As a further

LETTER OF CREDIT.

No. D_____ $_____ No. D_____

London,_____ New York,_____

To our Correspondents

Gentlemen:

We beg to inform you that we have accredited

_____ _____

to whom you will please furnish such funds as

_____ may require up to the aggregate amount of

_____ Dollars

say $_____ United States Currency against _____

demand drafts on _____ New York and

we engage that such drafts shall meet with due honor.

Kindly purchase drafts at the rate at which you

buy demand drafts on New York and please endorse the

amount of each draft on the back of this letter which is

available until _____ and must be returned

with the last draft.

Please see to it that the drafts are signed in your

presence and are plainly marked as drawn under

Letter of Credit No. D_____ of

dated _____

Asking for _____ your kind attention,

We remain, Gentlemen,

Yours very truly,

FIG. 10. Traveler's Letter of Credit, Issued in Dollars

precaution against overdrafts, the amount of each draft must be entered upon the back of the credit which is surrendered and returned to the drawee bank with the last draft drawn.

TWO CLASSES.—Travelers' letters of credit fall into **two general classes:**

1. The amount of the letters of credit may be paid in advance. If they are **drawn in dollars** the buyer is charged with the dollar amounts plus commission. If they are **drawn in foreign currency** the demand rate for that currency is generally used as a basis for computing the dollar cost. Redemption of any unused portion of the credit will be made generally at the same rate.

2. The credits may be unpaid but secured by the beneficiary's credit rating plus his contract to reimburse, with or without collateral security. If the drafts are drawn in foreign currency the correspondent bank will charge the withdrawal to the New York bank on the date of presentation under letter of advice. Upon receipt of this advice the issuing bank collects from its customer or charges his account at the demand rate plus interest from the date of presentation abroad. The buyer of such a letter of credit will pay the issuing bank a commission, usually about ½%. In addition, the correspondent bank sometimes charges a commission for negotiating the drafts.

The letters of credit of the **circular type** are addressed to all correspondents of the issuing bank requesting them to cash drafts drawn thereunder. If the credit be of the specially advised type it is addressed to one particular correspondent who alone will cash drafts drawn thereunder.

There is a further type of credit known as the **clean credit,** opened by mail or cable without the formal issue of a letter of credit. It is usually limited to a specified amount and runs for a particular period. It is analogous to opening a checking account abroad.

TRAVELERS' LETTERS OF CREDIT IN FOREIGN CURRENCIES.—If exchange rates for foreign currency are low when the holder buys the letter of credit, he may desire to take advantage of these low rates and purchase three letters of credit, one in pounds sterling, one in francs and one in dollars, to be used according to fluctuations in the exchange rates. If the rates for foreign currency should advance, he would use the sterling or franc letters. If the rates should fall the dollar letter would be used. This can be shown by way of illustration.

Illustration: A obtains three letters of credit, one in dollars, one in francs, and one in sterling, for the equivalent of $1,000 each with francs at $.05 and sterling at $4.70. At this time the holder can draw on his letters $1,000, fcs. 20,000 and £212: 15s. 4d.

When Foreign Rates Rise.—Should francs rise to $.06 and the holder of the letter uses all of the francs, he would be allowed to draw 20,000 francs which would then be the equivalent of $1,200, but for which he paid only $1,000.

Or, if sterling goes to $4.75, the holder of the letter of credit for £212: 15s. 4d. could use it all, an equivalent to $1,010.63, which was obtained by him for $1,000.

When Foreign Rates Fall.—In case francs fall to $.04 then the holder of the dollar letter of credit could obtain 25,000 francs or, if sterling drops to $4.60 a pound, he could obtain £217: 7s. 10d. for his $1,000 letter of credit.

TRAVELERS' CHECKS.—Travelers' checks are issued by banks, express companies and sometimes by tourist agencies. They may either be sight drafts on some bank or trust company or take the form of promises to pay upon demand. The **customary denominations** are $10, $20, $50, and $100. The

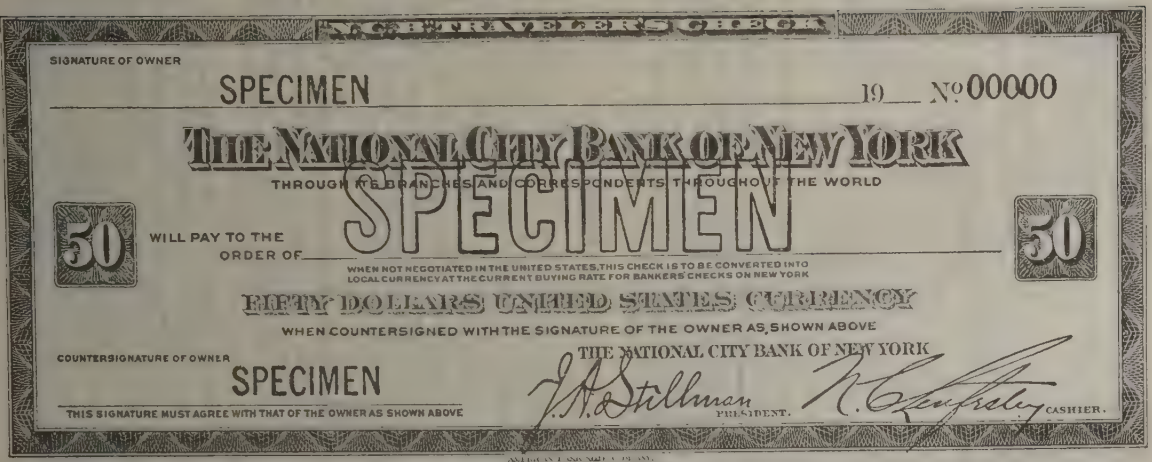

SIGNATURE OF OWNER
SPECIMEN
19__ No 00000
THE NATIONAL CITY BANK OF NEW YORK
THROUGH ITS BRANCHES AND CORRESPONDENTS THROUGHOUT THE WORLD
50
WILL PAY TO THE ORDER OF
SPECIMEN
50
WHEN NOT NEGOTIATED IN THE UNITED STATES, THIS CHECK IS TO BE CONVERTED INTO LOCAL CURRENCY AT THE CURRENT BUYING RATE FOR BANKERS' CHECKS ON NEW YORK
FIFTY DOLLARS UNITED STATES CURRENCY
WHEN COUNTERSIGNED WITH THE SIGNATURE OF THE OWNER AS SHOWN ABOVE
COUNTERSIGNATURE OF OWNER
SPECIMEN
THIS SIGNATURE MUST AGREE WITH THAT OF THE OWNER AS SHOWN ABOVE
THE NATIONAL CITY BANK OF NEW YORK
PRESIDENT.
CASHIER.

FIG. 11. A Traveler's Check

buyer signs each check at the time of purchase and again at the time of presentation. Comparison of the two signatures establishes identity. Travelers' checks issued in dollars before the war were converted abroad at fixed rates; nowadays they are generally accepted as so much demand exchange and in some cases pass as currency. Travelers' checks are sold in the United States for their face value in dollars plus a commission usually of ¾%; that is, 75 cents per hundred dollars' worth. The minimum commission is 75 cents. A traveler's check is illustrated in Fig. 11.

DELEGATIONS—LETTER TRANSFERS.—Delegations are sometimes used to make remittances abroad, especially when payments are small or periodical. The New York bank by letter of delegation instructs its correspondent abroad to pay to a certain party at a particular address a specified sum either in dollars or foreign currency. Upon receipt of the delegation the foreign bank makes the payment requested and charges the New York bank with the amount paid plus commissions and expenses. Delegations in foreign currency are sold at a rate approximately equal to demand exchange, due consideration being given to the amount of the remittance and the expenses involved.

A letter transfer is **non-negotiable.** It is generally issued by the bank in duplicate, of which only the original is delivered to the purchaser. If the original fails to reach the payee the bank then delivers the duplicate to the purchaser. It is customary among banks to honor either the original or the duplicate, whichever is presented first. The letter transfer, therefore, may be a safer way of transferring funds than the ordinary draft.

Bankers' Time Bills

TWO CLASSES.—A type of exchange frequently encountered in the market is known as "long bankers' bills" or bankers' time bills. These are of **two classes:** (1) drafts drawn by banks on their foreign branches or correspondents to mature a certain number of days after date; or (2) drafts drawn to mature a certain period after sight. The latter are the more common. The general purpose of such bills is to borrow funds abroad for short periods. In some cases, however, these bills are renewed with such regularity as to constitute almost a continuing obligation. Bankers often find it desirable or convenient to sell their own long bills in order to reimburse themselves for non-discountable commercial bills purchased. When the maturities of the two classes of paper coincide the proceeds of the commercial bills may be used to retire the bankers' long bills. The banker has an alternative in order to achieve the same result. He may contract for the future sale of spot or cables to mature with the commercial bills purchased and borrow in the local market. The cheaper method will, of course, be followed.

Again, bankers' long bills may be issued in anticipation of the receipt of funds abroad from any other source. Many times these bills are marketed solely for the purpose of **borrowing abroad** in order to lend in New York. The bills may be sold in New York or they may be sold abroad and the funds transferred to New York. In either case the proceeds are made available for use in New York. If the expense incidental to securing these funds abroad is less than the New York interest rate it will be profitable to borrow abroad and lend here, consideration always being given, however, to the relation between spot and **future rates.**

Illustration: Assume the following facts:

London "to arrive" discount rate	4%
New York interest rate	5%
Acceptance commission	⅛%
Stamp tax	1/20%
Sight rate	$4.85¼
90-day contracts for sight	4.85¼
New York rate for 90-day sight bills	4.79½

A 90-day banker's bill for £1,000 discounted abroad will realize £988: 5: as follows:

Face amount of bill		£1,000—
Less:		
1% discount	£10	
⅛% commission	1— 5—	
1/20% tax	—10	11—15—
		£ 988— 5—

Sight drafts sold in New York for this amount at $4.85¼ will realize $4,795.53 which may be loaned for 90 days at 5% and amount at maturity to $4,855.48. This latter amount, if converted into demand sterling at $4.85¼ will realize £1,000:12: or a sum sufficient to repay the loan and leave a small profit of 12 shillings. However, the sight rate may have risen enough during the life of the loan to wipe out the profit on the whole transaction. Hence the importance of providing at the initiation of the transaction against an unfavorable fluctuation in exchange. This can be done by purchase of a future contract deliverable at maturity of the loan.

THE FOREIGN EXCHANGE BROKER.—The services of the foreign exchange broker are of no little value in the foreign exchange market. These brokers are in constant telephonic communication with many buyers and sellers of exchange. They execute a majority of the **open market trades between banks.** Receiving an offer of exchange at a stated figure, the broker seeks a bid at a slightly higher figure; on receiving a bid at a certain rate, he seeks an offer at a slightly lower rate. In either case the seller makes delivery direct to the buyer at the higher figure and pays the difference to the broker as his commission. Some brokers specialize in transactions of this type. Others devote their efforts to the purchase and sale of commercial bills.

Brokers specializing in the marketing of commercial bills fall into two general classes:

1. Those who act solely as agents for the drawer, making no advances pending the sale of the bill.
2. Those who make immediate advances to the drawer, usually by meeting sight drafts attached to the bills when forwarded to the broker for sale.

The exporter whose bill has been sold through a broker of the first class draws at sight directly upon the purchasing bank, attaches the documents and his bill drawn to the latter's order and negotiates his draft at his own bank. The broker receives his commission from the seller of the bill.

Bills sold through brokers of the second class are handled in the following manner. The seller draws his sight draft with bill and documents attached upon the broker through whom the bill is offered for sale. The broker generally meets these sight drafts with the proceeds of a day loan from his bank, secured by a trust receipt covering the proceeds of the bill sold or to be sold. Upon

delivery of the bill, if it be already sold, the broker receives payment and retires his day loan. If the bill remains unsold at the end of the day the broker usually finances himself through a call loan from his bank secured by deposit of the bill of lading covering the merchandise against which the bill is drawn. Later, upon sale of the bill, the broker secures release of the bill of lading under a trust receipt, delivers the bill with documents to the purchaser and with the proceeds retires his loan.

SPECIE POINTS AND SHIPMENTS.—Under normal conditions the rates for various types of foreign exchange fluctuate in response to supply and demand within a range corresponding approximately to the **gold export** and **import points.** These specie points, so-called, are determined by the cost of moving gold in either direction. To **export gold** to England, for example, generally involves the following charges:

Packing and cartage, freight, insurance and possibly a loss of interest. This latter expense depends upon whether or not the time elapsing between payment here for the gold and receipt of its proceeds abroad exceeds the mailing period used in computing the price at which demand exchange is sold against the gold export. In addition, assay abroad of the exported gold may reveal a deficiency in weight due to various causes. This deficiency must be considered in computing the amount of sterling to be realized as proceeds. Suppose that the gold can be sold to the Bank of England at par, $4.8665 per pound sterling. We may make the following computation:

Cost of gold exported	$10,000
Expenses of export	25
Total dollar cost	$10,025
Proceeds realized abroad net of all expenses there	£2,050

The cost, therefore, of each pound of the sterling credit created abroad is $4.89024+. It is evident that gold export will not be profitable unless sight exchange can be sold at a rate in excess of this figure.

Conversely, **importation of gold** cannot be profitably undertaken unless demand exchange can be bought at a figure below the gold import point. This latter point is calculated by following the same general principles outlined above:

Cost of gold imported	£2,055
Expenses abroad	5
Total cost in sterling	£2,060
Proceeds realized in New York after assay and net of interest (20 days calculated from purchase of sight exchange to receipt of gold proceeds in New York)	$10,000

As calculated above the gold import point is $4.85436+. Demand exchange must be bought below this figure or no profit can grow out of the transaction.

Arbitrage in Securities

No discussion of foreign exchange can be complete without some consideration of arbitrage in securities listed on two or more exchanges located in different countries. A considerable number of American securities are listed and traded on the London stock exchange; a few British securities are listed on the New York stock exchange. To a lesser degree arbitrage is undertaken in securities listed in New York and European financial centers other than London. The discussion will be confined to arbitrage between New York and London.

LONDON QUOTATIONS.—It is the usual London practice to quote securities at a figure representing a percentage of par. American securities are converted, for quotation purposes, to a British par in pounds represented by **the American par divided by five.** For example, an **American stock** with a par value of $100 is converted to an **arbitrary par** of £20. If quoted in London at 90, this security is selling at 90 per cent of £20, or £18. If the American security be a **no-par value stock,** it is quoted in London at a price in pounds sterling per share. The actual price in dollars can be determined in either case only by considering the prevailing rates for sterling exchange.

Bonds are quoted in the same manner, that is, at a figure representing a percentage of par. The British par of an American bond is likewise determined by converting the American par at an arbitrary rate of $5 per pound. A quotation of 90 would therefore represent a price of £180 (90% of £200), the cost in dollars being ascertained by considering the prevailing rate for sterling exchange.

A quick method of determining the sterling price of an American stock or bond quoted in the usual London manner is as follows: in case of a stock, divide the quotation by five—in case of a bond, multiply the quotation by two.

FACTORS INVOLVED.—Before arbitrage can be undertaken with profit a number of factors must be considered; the relative price of the security in the two markets, the rate of exchange, interest while the securities are in transit, cable and insurance expenses. Securities bought or sold on the New York stock exchange usually are delivered and paid for the day following, unless the contract be "seller 7," "seller 10," or similar thereto, in which instance the seller makes delivery and receives payment seven or ten days later.

STOCK SOLD IN LONDON AND BOUGHT IN NEW YORK.—Arbitrage may be accomplished by a sale in London and a simultaneous purchase in New York of a given security; or by a sale in New York offset by a purchase in London. Let us first consider the former.

New York stock sells in London for 90 or	£18:—	:—
Deduct: Brokerage in London (assumed)	:	1:—
Net £ realized in London	£17:	19:—
To transfer these funds to New York in order to pay in dollars for securities bought in New York, sell £17: 19:— at demand rate. Net proceeds (assumed)		$87.10
Deduct: Insurance charges for securities shipped to London (assumed)		.25
Net dollars realized in New York (approximate New York quotation 86⅞)		$86.85

If the stock which can be sold in London for £18 can be purchased in New York, including brokerage, at a figure less than 86⅞, the arbitrage will result in a profit. The approximate figure 86⅞, as ascertained above, represents the **New York export parity** for the stock to be sold in London at 90. The **formula** may be stated as follows:

$$\text{New York export parity} = \left(\frac{\text{London quotation}}{5} - \text{London expense}\right) \times \text{demand rate for sterling} - \text{New York expense.}$$

To ascertain the **London import parity** of the New York purchase price, the reverse process is followed and the formula stated thus:

$$5\left(\frac{\text{New York quotation} + \text{New York expense}}{\text{Demand sterling rate}} + \text{London expense}\right)$$

BOUGHT IN LONDON, SOLD IN NEW YORK.—The second method of arbitrage mentioned above consists of a purchase in London and a sale in New York. The **New York import parity** of the London quotation is ascertained as follows:

Purchase price in London 90 or	£18:— :—
Add: Brokerage and insurance	: 2:—
Total London cost	£18: 2:—
To ascertain dollars to be transferred at once to London to pay for stock bought multiply £18:2:— by cable rate. (The amount is assumed)	$87.88
Add: 6% interest for 10 days (stock in transit), (transfer tax on sale in New York and New York brokerage expense)	.37
New York selling price	$88.25

$88.25 represents the New York import price of a stock bought in London at at 90. The formula is stated in this manner:

New York import parity = London cost + London expense × cable rate + New York expense and interest

The **London export parity** of a given New York quotation is figured in a reverse manner. The following formula applies:

London export parity =

$$5\left(\frac{\text{New York quotation} - \text{interest and expense}}{\text{Cable rate}} - \text{London expense}\right)$$

ARBITRAGE IN BONDS.—The same general principles apply to arbitrage in both stocks and bonds. However, there are certain facts to bear in mind, when trading in bonds. Bonds sold in London are subject to a **stamp tax.** Moreover, in order to allow sufficient time to mail coupons to arrive in New York at their due date, American bonds in the London market are **sold ex-interest** about 15 days prior to the interest date. If bonds are bought in New York during this period to offset a sale in London, the coupons should be clipped and cashed at maturity. If bonds are bought during this period in London for delivery in New York an adjustment must be made here for accrued interest.

BRITISH SECURITIES LISTED IN NEW YORK.—British bonds listed in New York are usually converted to an American par at the arbitrary rate of $5 per pound sterling. British shares are usually listed in New York and traded under the following circumstances: the British shares are deposited in London with the foreign branch of an American trust company. The American trustee, in turn, issues certificates of deposit which are traded in New York. It is important to bear in mind the number of British shares represented by the American certificate and to make due allowance for conversion charges assessed by the trustee.

SECTION 17

CREDITS AND COLLECTIONS

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SECTION 17

CREDITS AND COLLECTIONS

CREDIT DEFINED.—Credit is essentially the power to obtain goods, money, or services by giving a promise to return it or its equivalent at a future date. The element of return is a distinguishing characteristic. As the probability of return decreases, the soundness of the credit is proportionately lessened. Credit will, therefore, survive or disappear according to the willingness and ability of debtors to meet their obligations to return the capital received.

DISTINGUISHED FROM INVESTMENT.—Commercial or short-term credit must not be confused with **investment or long-term credit.** Debtors often default or are forced to postpone the return of capital because of the neglect at the outset to consider properly the uses to which the money, goods or services will be put, which results in the application of the capital to purposes from which its release is impossible or must be indefinitely deferred. For this reason, for example, it is considered bad commercial practice to borrow extensively on short-time notes and expend the funds for capital expenditures, such as opening additional branches, fostering subsidiaries, erecting additional buildings, or acquiring related businesses.

Concerns desiring to begin business or to expand permanently should seek to attract investors rather than to obtain the necessary capital on the basis of commercial credit. Investors do not require the return of their capital until the end of a term of years when the purposes for which the capital was advanced have been fulfilled, whereas, short-term credit capital, i.e., money or goods obtained on the basis of commercial credit, usually must be repaid promptly at the end of a short period, whether or not the borrower has achieved the purpose for which the credit was obtained.

Banks are the **largest dealers in short-term credit.** Their major function is to gather funds from a large number of depositors who may have no immediate use for them, and distribute them in the form of loans to borrowers who may have opportunities to use them with profit. It is essential to the existence of banks that they shall not become long-term lenders or investors, but adhere to the principle of lending credit. Although many banks invest some of their surplus funds in securities they properly do so only in such securities as are readily marketable.

CLASSIFICATION OF CREDITS.—From the standpoint of the financial manager credits may be classified as:

1. Banking credits
2. Investment credits, such as long-term funded debts
3. Mercantile credits
4. Retail or personal credits

Banking Credits.—These relate particularly to loans in one form or another obtained from banking institutions. They are important to the extent of their

use in furthering credit arrangements with mercantile customers who make purchases or settle their accounts by giving notes, acceptances, or other forms of negotiable paper which later may be offered to banks for discount.

Investment Credits.—These embrace issues of **bonds, debentures,** and other obligations which because of their deferred maturity may be considered as **funded or capital investments.**

Mercantile and Personal Credits.—For the purposes of this section, retail, personal, commercial and mercantile credits are treated as synonymous terms. The distinction is sometimes made that a sale of goods for resale is a mercantile credit, whereas the sale of goods for consumption is a personal credit. That is merely the distinction that may be said to exist between "wholesale" and "retail" accounts. Both are considered as one in this section because in both cases credit is extended to the "customer."

RELATION OF FINANCIAL MANAGER TO CREDITS AND COLLECTIONS.—The growth and permanence of modern business is largely contingent upon sound credit policies, and the **financial manager** is an outstanding figure in these matters. In the structural plan of almost every organization he is charged not only with the duty of making the necessary credit arrangements with its creditors, but also with the responsibility of maintaining sound credit relations with its customers.

Moreover, being in immediate touch with other phases of the concern's financial affairs, he is the logical officer to outline the basic credit policy, and it is his function to see that that policy harmonizes with the policies of other divisions of the business, such as sales, production and accounting. He is responsible for the application of the credit policy to the daily transactions.

Credit Policy

The development of a sound credit policy involves a consideration of **four major factors:**

1. Sales policies
2. The scale of production and overhead absorption
3. Margin of profit and credit losses
4. Organization problems and financial limitations

Credit policies will necessarily vary somewhat in different concerns because of the personal tendencies of the individuals who outline them. This is true, even though the businesses may otherwise be similar. But the foregoing underlying factors are none the less controlling and should result in strikingly similar and uniform policies.

CO-ORDINATION OF CREDIT AND SALES POLICIES.—Credit policies should be in harmony with profitable business building. Credit systems exist only by reason of their usefulness in the growth of a business, and they should be as liberal as possible, in order fully to promote sales expansion. In general, they should be restrained only by financial limitations of the creditor concern itself and by credit losses.

To attain a **maximum of business development** credit policies should not be evolved in a negative frame of mind; i.e., planned to reject everything at all unfavorable. Instead, they should result from a positive attitude, whereby every factor favorable to the situation receives full consideration. It is very important to gauge the efficiency of the credit department, not alone by the ratio of credit losses to sales, but by that factor considered in relation to **gross**

profits lost on orders declined. This element is an essential test of the credit policies. There are few concerns which can ignore the business building potentialities of a sound, well-defined credit policy. Excess funds may reasonably and wisely be used in extending new credits when there are apparent sales possibilities. Not many concerns have saturated the markets for their goods.

CO-ORDINATION OF CREDIT AND PRODUCTION POLICIES.—Credit policies should be fitted to production problems, particularly in businesses of a seasonal character, in order that peaks and valleys may be smoothed out. A manufacturer whose sales and production are limited in the winter months, the business being largely of warm-weather production and deliveries, desires an even, year-round production, as otherwise his **overhead** during the winter months becomes burdensome, and his working force tends to disintegrate. If he can adjust his sales and credit policies in such a manner as to bring forward to the winter months orders for goods to be delivered later, it is obviously to his advantage to do so. Credit is a recognized aid to this end.

Overhead absorption and savings are definitely linked up with maintained production, and maintained production with sales, which are in turn controlled by the selling price. The predominant factor in regulating proper overhead absorption is, therefore, selling price. An adequate and sufficiently elastic credit policy will make a price more attractive, as by the extension of special credit terms in cases where to do so will make the payment easier for the customer. Thus, by granting special datings and terms, the manufacturer may in the winter bring into his factory sales contracts for delivery and payment much later in the year, thus enabling him to operate nearer capacity in the winter. This is particularly true in non-style lines.

CO-ORDINATION OF CREDIT POLICIES WITH MARGIN OF PROFITS AND CREDIT LOSSES.—Credit policies must be balanced against both the margin of profit and credit losses. It is not enough to strive only to keep the percentage of losses at a minimum. A certain amount of loss from bad debts is not necessarily a catastrophe. Larger losses of gross profits on rejected orders is a much more important consideration.

In determining the credit policy with respect to this factor, or in measuring the real efficacy of the policy in operation, the preferable procedure is to study the percentage of losses from bad debts in connection with the percentage of orders rejected to orders received.

In the illustration below, cases 1 and 2 represent the results of two successive years. The company was more critical of poor risks in the first year and the result was that losses from bad debts were only 3% as against 5% in the year following, but the rejection of orders aggregated $500,000, as compared with no rejections the following year. The consequence of this change in policy was an increase of gross profits on the same volume of business and margin of gross profits.

	Case 1	Case 2
Orders received	$2,000,000	$2,000,000
Orders declined	500,000	none
Orders filled	$1,500,000	$2,000,000
Gross profit on orders filled (assuming that the company averaged 25% gross profit for each year)	375,000	500,000
Assume also that the credit department reports losses from bad debts as follows:		
Case 1, 3%; Case 2, 5%, or	45,000	100,000
The resulting profit would be	$ 330,000	$ 400,000

The more conservative policy followed in case 1 really cost the firm $70,000 in loss of gross profits instead of saving 2% on losses from bad debts. Hence, a mere reduction in the percentage of losses from bad debts is not alone a sufficient index to the efficiency of the credit department or its policies. It is the final balancing of losses from bad debts against **losses of gross profit** on rejected orders that measures that efficiency.

CO-ORDINATION OF A CONCERN'S CREDIT POLICIES WITH ITS FINANCIAL LIMITATIONS.—Every concern should arrange its credit policies with due regard for the limitations of its own financial structure, as well as those of its customers. The first consideration, however, is the determination of the approximate amount of credit business its capital will justify. This involves a consideration of the approximate **amount of capital** it may wisely tie up in **accounts receivable,** and in turn the portion of that amount which may be advanced to each customer or class of customers. For instance, if conditions make it unwise to carry more than $10,000 in book accounts, the concern should not undertake to sell 20 customers requiring credit lines of $1,000 each. There should be nearer $20,000 available for credit uses before undertaking to serve 20 such customers.

This illustration pictures one of the most prolific sources of over-expansion of credit and consequent financial embarrassment. To overload anything, particularly the financial structure, is to invite disaster.

Beginning with a conception of the capital available for credit purposes, the concern should seek to place that capital where it will yield the greatest return. What class of customers or what locality will be favored with the greater portion of it? What are the prevailing credit terms, and to what extent will the concern be guided in fixing its terms? Merely discussing these questions will automatically result in a more or less clearly defined credit policy. Once defined and adopted, the administrative officers are charged with its application.

REVISION OF CREDIT POLICIES.—The credit policy should be sufficiently elastic to permit of **frequent revisions** in keeping with changing conditions within the concern as well as with the general conditions within the trade or country. In order to keep informed as to the progress of the policies it will be helpful for the financial manager to study some of the **financial ratios** in the computation of which the accounts receivable are included. The ratios useful in this connection are as follows:

Current assets to current liabilities
Receivables to inventory
Total current assets to total assets
Sales to receivables

CREDIT CONTROL.—The financial executive must strive to maintain satisfactory ratios between the credit procured by the concern (its liabilities) and:

1. The proprietors' capital investment; and
2. The total current assets.

This means, first, that the **total liabilities** should rarely, if ever, be permitted to exceed the total capital and surplus of the business. When the liabilities do exceed the capital, the control of the business is very apt to pass to the creditors. A business man can have very little to say when his creditors announce that they "own more of the business than he does." Second, if the **ratio of current assets to liabilities** falls below, say 2 : 1 (except perhaps where the turnover is unusually rapid), the credit position is weakened, and operation

is made much more difficult. There may be many other faults of management which cause either or both of these relationships to show unfavorably, but it is none the less a fact that they should never be the result of a voluntary policy, that is, from the over-extension of credit to customers.

The financial manager should consider whether the credit arrangements existing with the concern's creditors is faulty, or whether the fault is due in part to erroneous policies in credits extended to its customers. If the former, the possibilities of funding the major portion of the debt or obtaining additional permanent capital are to be considered. If the latter, revisions of policy must be made immediately. Both situations pertain primarily to the relation of the concern to its creditors, but nevertheless apply with equal force to the extension and control of credit extended to customers. The co-ordination of these relationships is vital to proper credit control.

BUSINESS CYCLES.—Another prerequisite to a sound administration of credits is a recognition of major business cycles. The financial manager must be governed by them to the extent that pronounced **periods of inflation or deflation** are suitably offset by adjustments of credit policies. When prices are rising and the demand for goods is increasing, it is very natural for executives to propose outlays for additional plant facilities. The sales manager tends then to become over-optimistic concerning his selling plans; the banks are eager to make loans and additional temporary capital is thus readily obtainable. The tendency during such times inevitably invites very liberal credit extensions. At such a time the financial executive, by exercising a little foresight, can do much to avoid subsequent losses from unwise outlays of either funds or goods. On the other hand, during a period of depression, often referred to as a "buyers' market" as opposed to a "sellers' market," the financial manager may find it possible to stimulate sales by broadening his credit policies.

The Credit Department

SUPERVISION OF CREDIT DEPARTMENT.—In smaller organizations the financial manager may personally attend to the details of extending credit to customers. In larger organizations such tasks are delegated to a separate staff operating under his general supervision and direction. Such a staff is often styled the **"credit department"** or **"department of accounts,"** and is under the immediate supervision of a **credit manager.**

FUNCTION OF CREDIT DEPARTMENT.—The **amount of credit** to be extended in any one case is governed by the willingness and ability of the customer to pay his debts when due. This should never be lost sight of in any credit situation. The amount may be successfully determined, however, only in proportion to the facility with which available credit information may be gathered and interpreted.

Credit is given to those who are known personally or about whom information is available. The banker or merchant prefers to extend credit to his neighbor or countryman, rather than one remote from the community, since they have better facilities for obtaining current information concerning the nearby debtors' willingness and ability to pay.

The needs of modern business have given rise to certain recognized channels for the exchange of credit information. It is the function of the credit department to make use of such mediums, to gather, compile and interpret credit information concerning customers. This information is used in determining just what arrangements may be necessary with individual customers.

The second function of the credit department is to **follow up its credits,** to the end that debtors meet their obligations when due.

ORGANIZATION OF CREDIT DEPARTMENT.—Contact should be made by the credit department with one or more established **credit and collection agencies or bureaus** in order to aid the collection and dissemination of credit information and to obtain the benefits of co-operation. **Adequate files and records** are required, although they need be of no particular form or design. **Methods and procedures** should be outlined that will start inquiries for credit data on both new and old risks, and that will route incoming information and incoming requests for credit through proper channels. Practical safeguards should be established for fixing responsibility for infraction or disregard of the department's rules.[1]

The larger manufacturers, department stores and jobbers find it convenient to create a special department to handle disputed charges and adjust complaints by customers. It is not considered advisable to have this department too far removed from the credit department. The better plan is to maintain it merely as a sub-section or part of the credit department. Naturally, the information gathered by the **adjustment department** concerning customers who make unreasonable or unfounded claims is important information to be considered in extending future credit.

QUALIFICATIONS OF CREDIT MANAGERS.—The credit manager comes into contact with customers at a most delicate and important time. It is very necessary that he trust them to the extent of winning their confidence, by assuring them that he will give their affairs proper and fair consideration. Courage, honesty of purpose, and decision are essential.

He must be able to analyze the available information on a given risk and arrive at a conclusion as to its desirability. If the conditions fall short of a desirable risk as measured by the policy of his concern, he must tactfully refuse the account. His sincerity will do much in leaving customers in a favorable frame of mind, although credit has been refused. On the other hand, if the risk is acceptable, he should promptly say so in such a manner as to inspire the customer and by such policy develop the maximum sales possibilities of his company.

A knowledge of accounting, corporate finance, commercial law, economics, psychology and banking will be useful to the credit manager. His efficiency is certain to be measured by his understanding and application of the fundamental principles and practices in those fields.

KNOWLEDGE OF BUSINESS CONDITIONS.—The credit manager should understand the **major risks inherent in various types of business.** He should be able to judge the general prospects in a customer's particular business. The financial strength and efficiency of the customer's business and local conditions affecting his trade are all subject for study. He must know about the condition of crops, unemployment, strikes, the shifting of population and such other matters which directly affect credit risks.

The credit manager may find it advantageous to **group the customers into definite classes** according to trade, size, location, type, credit custom, etc. Each industry or trade has its characteristic terms and discounts. Communities often show special conditions not general elsewhere. Individual debtors within a community, trade or industry fall into definite groups with respect to their

[1] An excellent outline of methods and procedures for organizing and operating a credit department may be gathered from Credit Management, Olsen and Hallman, The Ronald Press Co., New York.

customs and tendencies. It is as futile to propose cash on delivery to an instalment customer as it is unwise to propose an instalment account to a "cash and carry" customer. It would be merely stupid to propose 90-day terms on open account to customers accustomed to buying on 10-day terms, or against sight draft with documents attached.

KNOWLEDGE OF REMEDIES.—The credit man must know what his remedies are in case an account is not paid when due. He is expected to collect such an account and on him falls the burden of deciding whether to try for a friendly adjustment or, in case of insolvency or fraud, whether proceedings should be begun in bankruptcy or otherwise. Observations made in the course of actual experience are the best practical guides available to the credit manager.

DUTIES OF CREDIT MANAGER.—A credit manager should establish **close personal contact with customers.** In large business houses credit is extended to so many customers that personal contact is difficult, if not relatively impossible. In such instances, however, salesmen and other representatives of the concern who make personal contact with customers can do much to gather credit information.

Credit policies cannot be separated from sales policies. The position of the credit manager is closely related, therefore, to the selling end of the business. It would be a comparatively simple matter for the credit manager to eliminate practically all bad debts, if he did not have to recognize sales possibilities. He could decline all accounts except A1 risks. Obviously, however, such a policy would seriously curtail sales and profits. The mere fact that the concern extends credit implies that it is willing to take at least the ordinary business chances of loss from uncollectible accounts. The credit manager must not restrict the function of his department to the mere rejection of all applications involving apparent risk. He should be able to distinguish with reasonable accuracy between a legitimate risk which the business is willing to assume and one that is wholly unsafe and undesirable. The maxim, "**Minimum losses with maximum sales,**" should be applied.

The credit manager must maintain a well organized department with trained assistants, co-operating in every way possible with other departments. He must also maintain a high degree of **familiarity with the accounts on the ledgers.** They must be constantly watched for signs of weakness. Such signs will prove to be his best practical guide in extending credit to former customers. He must know customers that are "slow pay"; those who often dispute the charges to their accounts, and those who frequently return merchandise. He may make frequent reference to the accounts themselves in order to maintain this vigilance. In larger concerns he may have the bookkeepers report daily, or from time to time the particulars of all accounts not running smoothly.

OPENING NEW ACCOUNTS.—Before a new account is opened or a new credit extended the credit manager should be able to foresee **a probability of payment,** together with the possibility of enforcing payment if later it should be found necessary. It is an irregular case where a credit manager is justified in extending credit which carries with it considerable speculation regarding the success of the debtor. The risks inherent in the business of the credit manager's own organization are usually ample for one concern. The only circumstances justifying credit in a speculative case would seem to be the possibility of unusual profit on the order or of future business. Such a transaction even then partakes of the nature of an investment in the customer and has no place as a legitimate mercantile credit.

SUB-NORMAL CREDIT RISKS.—Many concerns are perfectly willing to put their goods in the hands of debtors who have no free assets to stand as security therefor. Some manufacturers and jobbers appear willing to ship their goods and merchandise to debtors who can pay only if they succeed in selling those goods at a profit. Competition may force such terms, but the seller should bear in mind that at best he is a joint venturer in the business of the debtor; that he is thereby actually removing that amount of capital from his business and from his control.

The champions of sound credit policies, whose tendency is to follow conservative lines rather than the more liberal variety, will encounter much criticism. But credit is contingent on return, and a sound credit business cannot be built up in disregard of the ability of debtors to meet their obligations at maturity. It is very doubtful if any so-called era of prosperity will ever be found so continuous as to more than postpone the collapse of business founded on such a system.

WEAKNESSES DISCLOSED BY LEDGER ACCOUNTS.—As previously stated the credit manager must watch the progress of his accounts for signs of weakness. The accounts will disclose such signs as payments become irregular in time or amounts, as disputes arise, and as merchandise returns become frequent. The department must be so organized and maintained that these signs are promptly investigated and their significance understood. When weakness is indicated the alert credit manager is in a favorable position to approach the debtor tactfully and arrange for an early settlement of the account or its elimination from the books.

The credit department should gather information regarding irregularities in many other departments of the business. Frequent **complaints from customers** and **excessive returns of merchandise** often point directly to carelessness somewhere in the organization or to poor salesmanship. The credit department should detect these signals and report the circumstances in order that the faults within the organization may be corrected promptly.

DELINQUENT ACCOUNTS.—The financial executive should give special attention to **past due accounts.** Years of experience and observation in business show that when an item is past due, it is a sign of trouble. It might be stated as an axiom that a past due account is potential trouble; and the more promptly the account is taken in hand the less danger there is that a potential trouble will develop into a real loss.

To permit accounts to become past due without that fact coming automatically and surely to the credit manager's attention is inexcusable. If later it develops that his judgment in further dealing with the item has been faulty and the account lost or compromised, that is another matter. But nothing excuses him from having failed to consider the item in the first place when it became past due.

Forms of Credit

Credit as contemplated in this section is that credit usually involved in the sale of goods or services. The obligation to pay is generally represented by the conventional accounts receivable, sight drafts, acceptances, or promissory notes.

ACCOUNTS RECEIVABLE.—The earliest and simplest form of credit arising from sales is the **book account,** sometimes called an "open" or "charge" account. It comes into existence when the customer asks that his purchase be "charged" to his account. The purchaser gives no written promise to pay.

The seller assumes the burden of later proving that the goods or services for the amount claimed were sold and delivered. From the seller's viewpoint the outstanding disadvantage of this form of credit is that the charge is always **open to dispute** on grounds of non-delivery, terms, prices or quality. Moreover, the account is **not readily negotiable** because of those circumstances as well as for legal reasons. On the other hand, the seller finds it a **very practical method** for handling the account of a customer making small or frequent purchases. Many concerns, particularly those classified as retailers, wholesalers and jobbers consider the book account an important sales stimulant due no doubt to the convenience with which the sales may be made and charged. From the viewpoint of the buyer it is perhaps the most acceptable form of credit. Its advantages to buyers are so pronounced that if left to their own preferences they would doubtless prefer it to every other form of credit.

In connection with book accounts, it is especially important for the **sales slip** on which the sale or charge is first recorded to provide for a detailed record of the purchase, identification of the customer, and suitable record of terms of payment, shipment and delivery.

CLASSES OF ACCOUNTS RECEIVABLE.—Accounts may be of several classes, depending on the terms of sale or class of customer. There are, for instance, the commonly accepted 30-day or end-of-the-month accounts, instalment accounts, and special classes such as "will calls" and "leaves" as found in department stores.

ASSIGNMENT OF ACCOUNTS RECEIVABLE.—Book accounts may be assigned as collateral for loans, or they may be sold outright. In fact, the practice of borrowing on book accounts is not infrequent, although it is perhaps not to be favored unless other sources for obtaining money are not available. There are concerns which specialize in the business of lending money on the pledge of current book accounts. Their methods of doing business are considered at length in another section of this work. (See "Financial Institutions, and How to Use Them.") The assignment of book accounts is usually effected either under the notification or the non-notification plan.

Under the **notification plan** the payees (customers) are notified by the lender that he owns the accounts and that remittances are to be made to him. The outstanding objection to this plan from the sellers' viewpoint is that it gives undesired publicity. Notice in such cases is given by letter or by suitable wording stamped on invoices and statements.

The **non-notification plan** involves an added risk for the lender, as he is without the direct contact with the purchasers which he would have under the notification plan. This latter plan is to be preferred by the borrower, however, for under it he continues to bill and collect as usual, and in accordance with the agreement transfers only his receipts to the lender. The debtors have no notice of these relations.

The lender will advance normally from 70% to 85% of the accounts so assigned, retaining 15% to 30% as a margin of security until the customer pays the account.

Finance companies and banks which lend on open accounts urge that the benefits of this form of financing justify it; but credit men generally are opposed to it, particularly the National Association of Credit Men. That association has stated that publicity in this respect is necessary to prevent fraudulent practices, and it has advocated laws to require formal notice of such transactions particularly in cases of chattel mortgages. Actual business experience con-

demns the assignment of open accounts receivable whenever at all possible to avoid it.

The financial manager must consider the probability of his customer having assigned his accounts, thereby creating liens on his assets which will take precedent over the claims of general creditors in cases of insolvency.

PROMISSORY NOTES.—Sales are often made regularly to certain classes of customers on the basis of promissory notes, which are merely a written promise to pay a definite amount at a fixed or determinable date. In other cases, the note form of obligation is proposed when a running book account has attained a certain size or age. In businesses where book accounts are carried to any considerable extent, however, it is more often the case that promissory notes are taken only as a preliminary step in the **collection of delinquent accounts.** That procedure is usually an effective step in the right direction, as the average customer seems to feel a sense of responsibility about meeting his note which is not so noticeable where his open account only is concerned. The obvious corollary is that the customer offering promissory notes in settlement of his book account is exhibiting signs of financial weakness.

ADVANTAGE OF SETTLEMENT OF ACCOUNTS BY PROMISSORY NOTES.—The note form of obligation **fixes the amount of the debt** and virtually eliminates the probability of later disputes about prices, quantities, quality, etc. In this form the debt is more readily and conveniently salable in case it is desired to realize upon it before payment.

The prompt payment of open accounts and promissory notes at maturity can be assured, if necessary, by obtaining a **pledge of other assets** as security therefor, or by arranging liens on the things sold. Instalment accounts are usually supported by a contract which embodies a written promise to pay, and a pledge or a lien on the goods sold. In these respects they partake of the status of promissory notes, but in reality they are only secured book accounts. Such contracts are rarely if ever negotiable.

SIGHT DRAFTS AND TIME DRAFTS.—These two credit forms are very popular among larger concerns. Either form is an order drawn by one person (the maker) ordering a second person (the drawee) to pay a definite sum of money to a third person (the payee). Sight drafts are payable on sight, i.e., when presented, whereas time drafts are payable usually in 30, 60, or 90 days, and often require ad interim **"acceptance"** by the drawee.

As with other forms of credit, the use of the sight draft or the time draft in connection with sales is limited somewhat to special classes of customers and is more often confined to certain trades or industries. Either form may be used, however, whenever its characteristics satisfy the particular demands of the parties at interest. The sight draft is used when payment is expected at once upon presentation of the draft, whether or not title is retained by the seller until the draft is paid. The time draft is particularly suited to similar cases when payment is expected on a designated future date.

Both forms of drafts have a secondary value in the collection of book accounts. Those arising from book accounts do not rank with those originating with the sale of commodities. In either case, however, they circulate readily in banking channels, although banks generally accept "for collection only" those drafts originating in the collection of delinquent accounts. The use of drafts in this latter connection is often productive of good results because many persons accepted make a special effort to honor them rather than permit their local bank seller know that they are delinquent in meeting their obligations.

TRADE ACCEPTANCES.—Trade acceptances, as the term is commonly understood today, are time drafts which are drawn by sellers on buyers for the purchase price of commodities and are "accepted" by the buyers. Their use in connection with current sales distinguishes them from sight and time drafts. They may be used as a convenience in adjusting or closing an account for borrowed money or past due charges but they should not then be spoken of as "trade acceptances."

Use of Trade Acceptance Illustrated.—X, who is a manufacturer in Chicago, sells goods to Y, who is a wholesaler in New York. When X sends his invoice, he also sends to Y a 60 or 90 day draft drawn on Y. If Y wishes to pay X at once by means of cash, he destroys the draft; otherwise he accepts the draft by writing "accepted" across the face of the draft, indicating the place at which he wants to pay the draft when it becomes due. He then signs it and returns it to X. X can either have it discounted at his bank or hold it until it is due, and then present it to Y's bank for presentation and payment. If X desires to discount the paper he is expected to be able to show that it has arisen out of an actual commercial transaction; that is to say, the financing must have taken place through the movement of goods from producer to consumer. The trade acceptance is not intended to be given for old debts, or the purchase of fixed assets.

ADVANTAGES OF TRADE ACCEPTANCES.—The advantages of trade acceptances to the seller may be summed up as follows:

1. They establish the correctness of the amount due.
2. They practically eliminate the common abuses of unwarranted returns, excessive discounts and other unjust claims.
3. They facilitate and improve collections. Debtors often attach importance to written instruments bearing their signatures, and are likely to make preparations to honor them promptly on maturity.
4. They tend to reduce losses from bad debts, and to cause buyers to be more conservative in regulating their purchases.
5. They are an aid in financing. Their ready marketability and fixed maturities make possible more accurate forecasts of receipts, and make borrowing relatively easy.

They are **generally beneficial,** and their use is desirable wherever business customs and practice make their adoption practical. That they may not have been theretofore used is no objection to their adoption if other circumstances are favorable. They enable sellers to do business more economically and enhance their borrowing power. They furnish banks with sound, self-liquidating, two-name paper, and thereby strengthen their position. These circumstances tend to help the entire community, in the benefits of which all share alike.

BILLS OF EXCHANGE.—The term "bill of exchange" is used commercially to designate a **form of sight or time draft** drawn against shipments to or from foreign countries. (It has a broader legal meaning.) Such bills may be drawn with **"documents attached,"** in which case the goods do not come into possession of the buyer until the draft is accepted or paid, as the case may be. This form of payment is used effectively in connection with trades between parties more or less known to one another that do not require the convenience of intermediate arrangement with an international banking house, as by a letter of credit.

LETTERS OF CREDIT.—Foreign trade is handled to a large extent by means of **commercial letters of credit.** They are issued by banks to facilitate payments for purchases and sales in foreign countries. They represent merely the amount of the buyer's credit which the issuing bank guarantees. Sales made against letters of credit are therefore not more nor less than a sale for cash. The question may arise whether or not the seller is thereby extending credit to the bank, particularly where the draft is a time draft on, say, 90 days sight. The seller in that case would be extending credit to the bank, but for all intents and purposes of this article the seller may consider the bank's obligations as the equivalent of cash.

Sources of Credit Information

USE OF CREDIT INFORMATION.—The growth of sources of credit information has developed with the expansion of the credit system itself. They are now highly organized, and in many instances by specialization they are prepared to meet the most exacting demands. If used to the fullest extent, wilful fraud is about the only unfavorable phase of credits they do not effectively forecast or may not be expected to forecast. Even in cases of fraud they do much to prevent a repetition.

The responsibility for credit losses lies not so much with the sources of credit information nor with the information itself, but with the failure or neglect properly to make use of it. Credit losses are inexcusable when they arise out of failure or neglect to use available credit information. There is a strong tendency in the routine of business to pass repeat orders for an indefinite time after a credit is once established. Vigilance must be maintained after the account is opened.

CUSTOMERS' WRITTEN STATEMENTS.—The first source of information concerning a credit risk is the customer himself, from whom a personal statement, either written or oral, may be obtained. It is correct and proper to ask a new customer for a written statement of his financial affairs.

As credit extensions continue, statements should be obtained from time to time and the customer should respond willingly to such requests. Many concerns buying on credit voluntarily submit periodical financial statements.

The statements **should be signed** by the customers and should include over the signature a declaration that it is then made for the specific purpose of obtaining credit. Such statements have a definite legal standing in prosecution for fraud.

Failure or refusal to answer requests for statements may and should reflect most unfavorably on the customer. Confused or incomplete statements are very apt to make a bad impression on the seller. Upon the credit manager devolves the responsibility of evaluating the significance of incomplete or otherwise irregular statements.

CUSTOMERS' ORAL STATEMENTS.—Personal interviews are fruitful sources of credit information, but usually amount to no more than the acceptance of the customers' oral statements. The interview offers many advantages for an insight into the customers' character and behavior and it is helpful in that respect. As a result of the interview, the credit man may or may not be satisfied with the oral statements made by the customer concerning his willingness and ability to pay. Oral statements are in fact frequently accepted and credit extended thereon but this is a questionable practice unless the seller

has had previous dealings with the customer or unless the credit man can satisfy himself from some collateral source as to the customer's integrity.

The **outstanding objection to the oral statement** is that it offers nothing tangible for reference in case of later misunderstanding or dispute. It has practically no standing in law. All too often "oral statements" are "just talk." Not that they are always valueless, for many business men have the highest regard for their spoken words and experience shows that they strictly live up to them; but if the credit man has erred in accepting the oral statement as trustworthy, he has thereby burned all bridges behind him and left no second line of defense. The written statement, on the other hand, is just as conveniently furnished and is decidedly the best for all parties concerned.

OBJECTIONS TO CUSTOMERS' STATEMENTS.—There are no objections to information that may be received directly from a customer, except the general objection that it may be without verification. This fault naturally leaves the way open for unconscientious persons to impose upon the credulity of the seller by withholding adverse information.

Many concerns when submitting written statements arrange for their preparation by public accountants, thus supplying the necessary verification.

FALSE STATEMENT LAWS.[2]—The laws of nearly every state now provide for the punishment of offenders who obtain money or property on false statements of condition. The Uniform False Statements Law, enacted in a number of the states, tends to make issues clearer than was the case under the old larceny laws. It provides in substance **punishment:** (1) for the mere making of a false statement in writing for the purpose of procuring credit, with intent that it shall be relied upon; (2) for procuring property or credit upon the faith of a false statement, the person procuring the credit not necessarily being the one making the statement; and (3) for falsely representing that a previous written statement is true with respect to present conditions, thereby procuring credit.

The essence of the major crime under the new law is the making of a false statement "with intent that it shall be relied upon." The uniform law does away with any difficulties involved in the former larceny laws. The only elements of proof required against the defendant are that:

1. He made a statement, or caused it to be made.
2. The statement is false.
3. It was made with the intent that it should be relied upon.
4. It was made for the purpose of securing credit in some form or other.

By also making it a misdemeanor to make a false statement even without fraudulent intent, the statute covers **exaggerated or untrue statements** that may not have been intended to defraud anyone. The new law does not permit the defenses customary under the former larceny laws, such as the necessity for proving literally that the debtor actually got the goods, and the defense that the mere extension of a previously existing debt could not be made the basis of larceny.

If the false statement was mailed, the debtor may also be prosecuted under the federal laws, although this law (using U. S. mails to defraud) requires proof that the debtor issued a false statement in writing and secured merchandise or credit on the basis of the statement, and that the statement was sent through the mails. This section of the federal law is found in U. S. Criminal Code, Sec. 215, and reads as follows:

"Whoever, having devised or intending to devise any scheme or artifice to

[2] See also law on false financial statements in Section 6 on Business Law.

defraud, or for obtaining money or property by means of false or fraudulent pretences, representations or promises shall, for the purpose of executing such scheme or artifice or intention so to do, place or cause to be placed, any letter, postal card, package, writing, circular pamphlet or advertisement, whether addressed to any person within or outside the United States, in any postoffice or station thereof, or street or other letter box of the United States, or authorized depository for mail matter, to be sent or delivered by the postoffice establishments of the United States, or shall take or receive any such therefrom, whether mailed within or without the United States, or shall knowingly cause to be delivered, by mail according to the direction thereon, or at the place at which it is directed to be delivered by the person to whom it is addressed, any such letter, postal card, package, writing, circular pamphlet or advertisements, shall be fined not more than $1,000 or imprisonment not more than five years, or both."

In order to preserve tangible proof that a statement was sent through the mails, the National Association of Credit Men and some printers have devised statements combined with mailing envelopes, so that the statement automatically carries with it evidence of having been mailed. This result is effected by having the form cut to permit of folding and sealing, so as to enclose the printed side, leaving the blank side of the paper for address and stamp.

REASONS FOR FURNISHING STATEMENTS.—The principal reason for furnishing statements is the fact that the successful working of the credit system is dependent upon it. The jobber or merchant, for instance, who is asked for a statement of his affairs, makes like requests of his customers. Without such information no link in the chain can hold. Each concern thus contributes to the establishment and maintenance of its credit position and the entire credit structure. The credit system which is recognized as being so helpful and necessary, is materially strengthened and everyone shares in the beneficial result. The right-thinking person realizes that the credit man is entitled to certain information regarding his business and that his interests are furthered by securing the full confidence and intelligent co-operation of the enlightened credit man.

IMPROPER REQUESTS FOR STATEMENTS.—It has now become common practice among larger business houses to request statements from all credit customers. The mere fact that this practice has become so universal has taken from it the objectional aspect of inquiry, curiosity and doubt. There is no ground upon which a debtor may object to submitting a statement of his condition at the time of applying for credit, or at any other time a legitimate request is received. It should not be considered inquisitorial. It does not challenge his good faith. Instances may occur, however, where persons or firms seek statements from customers when their purpose in doing so is in no way concerned with the granting of credit. In these cases the inquiring person may seek **"inside information"** as to the standing of a competitor or customer or may desire other information. Such requests for statements should be refused. It would not seem difficult for a debtor concern to recognize such a request, unless it came indirectly through a credit agency. In that case the debtor must refuse to answer, or rely upon the integrity of the agency to see that no improper use is made of the information given.

CAUTION IN GIVING STATEMENTS.—There are notable instances where certain large and well established concerns have steadfastly refused to give statements of anything to anybody. They represent, the extreme in that direction. No objection is seen to giving statements to those directly interested in extending credit, or to recognized agencies, provided, however, such state-

ments contain no confidential information as to clientele, volume of business done, costs, or expenses or earnings, as such matters are strictly confidential and can be safely disclosed only by the exercise of the utmost discretion. A concern is justified in looking with suspicion on a general request for such data, particularly when it comes from an "agency," or when the use to be made of it is not subject to direct control by the giver. Reputable agencies do not expect such information. It may be given to banks and principal creditors if necessary to a continuation of relations with them, but it should only be given and received in the strictest confidence.

It is proper to give statements only to recognized inquirers, and then to give general information as to financial worth and history, together with references as to reputation for prompt payment.

USES OF CONFIDENTIAL INFORMATION.—The ideal of every credit manager is to treat information received by him in the same or greater confidence than he would want similar information about his own concern treated by those to whom he gives it. He should have had sufficient experience in dealing with his creditors to sense his full responsibility with respect to the limited uses that should be made of confidential information that may come into his hands from his customers.

DANGER IN STALE STATEMENTS.—To have at some time past obtained a statement from a creditor is not all that is required of the credit manager. Failures occur by the thousand every year. Successive statements are necessary where the credit extensions are continuous.

Serious losses have been sustained by reason of credit extended on the basis of statements as of six months, a year, or more preceding. Any statement that is not of current date should be questioned, and whenever possible a current statement should be obtained. If a current statement cannot be obtained, the older statement should be used with caution, and then only if it is supported by a written declaration that no substantial change has occurred since its preparation.

OWN LEDGER EXPERIENCE.—A source of credit information second in importance only to the customer himself is that found within the records of the creditor's dealings with each customer. Many characteristic tendencies of great value will appear from the study of customers' accounts, particularly when the accounts are active. The signs of weakness, as hereinbefore mentioned, such as irregular or delinquent payments, frequent complaints and merchandise returns, are almost infallible indications of ultimate loss if the account is continued without correction.

It is needless to get reports from agencies and from other creditors of the customer, when one's own book experience shows the account to be a poor credit risk and an unprofitable account. An account becomes unprofitable in proportion to the extent that irregularities appear. There may be no ultimate loss from uncollectibility; nevertheless the extra overhead expense of frequent clerical and executive attention to such accounts soon reaches the point where it is obvious that the account causes more trouble than it is worth.

The accounts should be examined periodically for evidences of customers who buy seasonal goods and return them only after the season is well advanced or has passed, or customers who buy only special offers and bargains, such as "jobs," and later return the lesser values of the lot.

Pyramiding usually foreshadows a bad debt. This condition develops as customers continue to buy but pay amounts less than the recent charges, resulting in a gradual but ever-increasing amount of debt.

Such signs as these often appear merely because of shrewd practices on the part of the customers, but unless they are controlled they will almost invariably lead to credit losses. Information obtained from outside sources, as from agencies, is useful in determining the true significance of these apparent irregularities. When the information from the outside shows similar conditions elsewhere, the customer should be reminded of the unsatisfactory condition of his account; if the information shows the conditions to be confined to the creditor concern and that other creditors are having no difficulties with the account, such information is useful in directing attention to probable faults within the creditor organization, the disclosure of which leads in turn to corrective measures.

CREDIT MANAGER'S PERSONAL EXPERIENCE.—The essence of the credit manager's function is to know when, where and how to get credit information. It is no excuse that the information coming to him from various sources is meager or incorrect. It is his responsibility to separate the wheat from the chaff, and to get the fullest information available. Not the least of the sources of information open to him are his **own personal experiences.** On these he should draw constantly. As previously mentioned, these are probably nowhere better recorded than in the ledger accounts.

Another of the credit manager's surest sources of information on credit risks is his knowledge of individuals and their movements from one concern to another, from fires to failures, or from obscurity to prominence. It is important that he recall Mr. John A. Somebody, now incorporating the Bargain Stores Company, as the same John A. Somebody who formerly failed under rather inauspicious circumstances. It will be helpful to recall that Mr. Robert G. Anybody, who has organized the Best Service Co., brings to the new firm the highest type of personal credit standing. He may read trade journals and newspapers for legal notices of business suits, and for weather, crop and industrial conditions; he should keep in touch with new incorporations and partnerships, fires, bankruptcies, assignments, etc. Information on these points normally comes in from established sources, but the duty of having it, or of bringing it in, devolves primarily on the credit manager.

SALESMEN AS A SOURCE OF CREDIT INFORMATION.—Except in retail lines salesmen usually call on customers and meet them personally. The salesmen are the only representatives of concerns who see many of their customers. Moreover, they meet them more or less frequently. Therefore, it is apparent that salesmen are in a favorable position to become acquainted with the business sagacity and local reputation of customers. So it is only natural to rely on salesmen as an important source of credit information.

It does not follow as a rule, however, that salesmen make good credit or collection men. The art of selling and the business of extending credit are dependent one on the other, but the training of salesmen, as distinguished from credit men and collectors, tends in different directions.

Salesmen of importance recognize the need of credit information and the need of making collections precisely as credit men recognize the necessity of making sales. Salesmen feel at times, however, that they should not be charged with any credit responsibility and are particularly opposed to making collections. They assume that their duty is to sell goods, regardless of the fact that goods shipped to poor risks are more nearly a gift than a sale. They are prone to forget that it requires no salesmanship to secure such an order. The vast majority of salesmen, however, do gather credit information, and it is found to be current, practical and useful. They make collections in many cases, and

rarely overlook the possibilities of future business after the remedial treatment has been applied.

Credit managers doubtless find also that salesmen co-operate with them somewhat in proportion to the amount of encouragement and assistance credit managers may be able to extend to them in the matter of making sales. If credit managers will acquaint the salesmen with the reasons they may have for declining risks they will thereby do much to retain the salesmen's interest.

Salesmen are "on the ground," and are in position to furnish information regarding customers' business ability, habits, reputation, location, references, and other local conditions. They can size up at a glance the condition of customers' stock, i.e., whether it is clean, well displayed, out-of-style, unseasonable, or not fitted to the demands of the community served. They learn the selling policies, whether cut rate or at suitable profit; whether customers buy prudently or recklessly, whether they make good selections of patterns, styles, qualities and quantities, or over-buy. The salesmen can judge of the manner in which these concerns serve their customers; whether clerks are attentive and respectful, or otherwise. The home, business and personal habits of customers come more or less under the observation of salesmen. They obtain information regarding the customers' local reputations from remarks made by competitors and neighbors or fellow salesmen, and by comparison with other concerns visited. They actually see the locations of customers' places of business, and their suitableness with respect to the trade served, competition, accessability, etc.

If the crops in a certain community have failed or are late, or any economic outlook of the community is unfavorable, the salesmen are sure to learn of it, and may approximate the effect on their customers. Salesmen see changes in transit facilities and other civic adjustments, such as the opening of new car lines and the abandonment of others. When asking customers for references, they may verify in a large measure the information given by noticing the trade brands of the merchandise on the shelves and identifying them with their respective houses. The salesmen are not detectives, but they are remiss in their duty if they do not instinctively take such matters into consideration, and report any important information concerning the customers' credit risk. In selling an **"opening bill,"** or when selling a customer for the first time, it is quite customary for salesmen to discuss credit arrangements, and even to ask for a written statement of financial condition.

VALUE OF SALESMEN'S REPORTS.—The value of the salesmen's reports depends largely upon their ability properly to interpret and evaluate the conditions apparent to them. Such reports rarely ever contain more than **hastily formed opinions,** and should be received with that in mind, making due allowances also for the idiosyncrasies and generally optimistic viewpoint of salesmen. It is well to remember also that a certain amount of "window dressing," done in order to influence the trade, may have also affected the impressions of the salesmen.

PRINTED FORMS AS AIDS TO SALESMEN.—Salesmen work fast and often write very poorly, so that it is important to provide them with every convenience possible. The value of their reports will be improved if they are supplied with printed forms designed to facilitate the making of reports, and to bring to their minds the factors in which the credit department may be particularly interested. Any special information required may be conveniently arranged for by letters to salesmen asking for exact information desired, but **printed forms** are better for reports on general conditions. The size and word-

ing of printed forms are governed by the extent to which it is the policy of the credit department to rely on salesmen for information. A long form of report can be prepared which will include practically all information necessary to the extension of credit. A short form, which would be more acceptable to salesmen, would limit the queries to matters outside of history and financial worth, and include only the salesmen's general observations and trade references. With the short-form report, credit managers would refer to agencies for the information not included in the report, and, if necessary, for verification of the report.

LONG FORM OF SALESMEN'S REPORTS.—A long form of report for use by salesmen should call for information about as follows:

NAME OF CONCERN:.....

ADDRESS:.....

PRINCIPAL PARTNERS OR OFFICERS:

Name	Nationality	Age	Capacity
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

* State briefly important previous connections of these members of the firm:

.....

.....

.....

Are any liable as endorser or bondsman?.....

Did any ever have fires or fail?.....

Present firm organized:.....

Name of predecessor concern, if any:.....

* Was previous business successful?.....

* If not, why not? .....

.....

* If not, how has new concern planned to overcome that condition?.....

.....

General character of trade served: Is it agricultural or industrial, wealthy or middle class, city or country, fancy or staple?.....

.....

Location with reference to principal class of trade served: Is it good, fair or poor?.....

.....

Principal lines of merchandise carried:.....

Is it suitable to trade served?.....

Estimated value of total stock carried:.....

* Is estimate high or low in your opinion?.....

What proportion of total stock is merchandise similar to our line?.....

What proportion of total stock is our line?.....

* Condition of stock: Is it clean, well-displayed, well balanced, etc.?.....

.....

Is stock insured?.....How much?.....

Cash or credit business, or both?.....

Average sales and expenses for several recent months:

Month	Sales	Expenses
.....	.....	.....
.....	.....	.....
.....	.....	.....

* Do they pay too much rent?.....Too many or two few clerks?.....

* Are they considered careful buyers?.....Good managers?.....

* Do they seem to be capable and are they making money?.....Is that the public opinion?.....

* Is local opinion as to characters of members of firm favorable?.....

* Have you heard anything to the contrary?.....
Are the members of the firm interested to any extent in other businesses?.....
.....
Value of real estate and other property in name of the concern:.....
Describe briefly:.....
.....
.....
Any mortgages, liens, or judgments?.....
If a new concern, how much cash and other tangible property was paid in?.....
.....
Buy principally from:

Names	Addresses
.....	.....
.....	.....
.....	.....
.....	.....

Banking references:.....
.....
Remarks:.....
.....
.....
.....
(Signature of Salesman)

NOTE: This form may be expanded to any extent considered desirable; as, for instance, to include a balance sheet.

The foregoing long form of report cannot be presented to the customer for his signature because it includes certain opinions of the salesman which it would not be tactful to disclose to the customer. If it is desired to have the salesmen obtain the signature requisite under the false statement laws, it will be necessary to divide this form of statement into two parts. The queries marked with an asterisk in the above form would be put on a separate sheet for the signature of the salesman only. The remainder of the queries would then be on a second sheet to which could be appended a statement for the customers' signature reading as follows:

> I have read the foregoing report and submit it as my own for the purpose of obtaining credit and to induce you to sell me (us) merchandise intending that you should rely thereon respecting my (our) financial condition.
>
> .....
> Proprietor, officer or member of the firm

SHORT FORM OF SALESMEN'S REPORTS.—A short form of report could be arranged along the following lines:

NAME OF FIRM:.....
ADDRESS:.....
LOCATION TO BUSINESS CENTER:.....
PRINCIPAL LINES SOLD:.....
Condition of stock: Is it clean, well-kept, active and well balanced?.....
Efficiency of organization:.....
Competence of management:.....
Local conditions:.....
Local reputation:.....
References:.....
.....
.....

The salesmen should make some form of report on first orders, and should always communicate important happenings to the credit department.

OTHER USES OF SALESMEN'S REPORTS.—The sales manager is often interested in knowing customers' reaction to salesmen's visits. He can get the data by special reports, or he may include his requests with the credit form as by adding other questions or preparing spaces for tabulation of the sales information. The information usually desired consists of a record of orders received, kind of goods bought each visit, and remarks as to when the customer may desire to buy, or the like. An established form of symbols or a code is most practical in reporting this information. An advantage of gathering sales statistics on a separate report would be that the report may then be used as a "route" card which the salesmen may take along on their trips. Credit reports are better filed in the office and should remain there.

WHEN SALESMEN SHOULD *NOT* ASK FOR CREDIT INFORMATION.—The discretion to be used in obtaining credit information through the sales force depends to a large extent upon the class of customers in question. **Small traders** can be approached for much more information than it is ordinarily prudent to request of larger houses. It would be unfortunate for salesmen to ask for credit information from the **larger and older concerns.** It is practically settled by custom that these concerns have established their standing with the agencies, and that they will not be put to the inconvenience and trouble of again furnishing such information to salesmen with whom they might place orders. Moreover, it will be found too expensive to have salesmen spend time gathering information which can be obtained by mere inquiry of an agency or other recognized source of such information. It is preferable to secure the salesmen's report only from the smaller or more distantly removed customers, and in cases where the credit situation with any given customer may be relatively acute.

SPECIAL CREDIT INVESTIGATORS.—Houses taking large advance orders for future delivery, as on contracts where the goods are to be manufactured, or covering delivery over an extended period, often have special representatives visit the customers for the purpose of determining and arranging the credit treatment. These representatives usually go into the subject rather thoroughly. It is customary for them to review the financial books and records, commitments, costs, etc. If the special representative is alert, tactful and properly informed, he may frequently obtain important and confidential information that is of such a delicate nature as would preclude its publication in any agency report. However, to proceed intelligently, the special investigator should know as much as possible about the account and the reasons behind his visit.

BANK REPORTS.—Credit managers do not often hesitate to call upon their immediate banking connections or any other bank that is given as a reference, or which they may have reason to believe may inform them concerning a credit risk. Occasionally, the banks' replies may be inaccurate and they may be non-committal, particularly in those cases where the credit department needlessly requests information concerning inconsequential risks, or where the inquirer is unknown to the bank. Whatever the tenor of the replies, no harm results from making reasonable requests of the banks, but unreasonable requests simply will be perfunctorily answered or ignored.

It is not in accord with the banker's ideals to discredit his depositors or his community. Moreover, his institution is not a credit and collection agency. On the other hand, the banker realizes more fully perhaps than anyone else that his business above all others is primarily based upon the credit system, and he will do all that he fairly and properly can do to insure the soundness of that system.

Banks as a source of credit information reach so far beyond the limits touched by credit agencies in the matter of confidential, vital information that inquiries should only be made in worth-while cases, and then only when the request is clothed with formal courtesy and discretion.

Unless he has specific permission from a customer to inquire direct, the well-informed credit manager will invariably seek to tap this valuable source of information through his own banking connection, relying upon that institution to transmit the request to the bank of its acquaintance from which the information desired may be obtained.

MERCANTILE AGENCIES.—Of all external sources of credit information the mercantile agencies are perhaps the **best known and most frequently used.** Beginning a few years after a disastrous panic in 1837, when losses from bad debts were enormous, two agencies were organized to gather and compile credit information. These organizations were the present R. G. Dun & Co., an outgrowth of a business founded in 1841, and Bradstreet Co., founded in 1849. With their present organizations of thousands of trained reporters, correspondents and attorneys, located in every important trading center, they have become so universally recognized as to require no introduction to the smallest and most obscure business man. They are honored today as powerful business-building institutions.

In addition to these two foremost general agencies there are also many **special agencies** which limit their activities to particular lines, such as jewelry, millinery, textiles, garments, furniture, etc. Agencies of this kind are most useful to jobbers, wholesalers, manufacturers and banks, but they are only indirectly, if at all, helpful to the retailer.

MERCANTILE AGENCY REPORTS.—Statements furnished by an agency may be limited to any particular subject inquired about, but are generally uniform and comprehensive, including for instance:

1. History of the past record of the concern or the principals conducting the business.
2. Financial statements showing assets, liabilities and net worth. These statements are as of current and earlier periods. The agency neither audits nor verifies the statements obtained by it, but requires the signature of the merchant.
3. Comments on general conditions indicated by the statements.
4. Information as to character, habit and business capacity; and as to location, business outlook, etc. These matters are reported as mere hearsay, but they should not be disregarded unless actually known to be erroneous. Often they will be found to be trustworthy.
5. Information regarding opinions and experiences of other creditors.
6. Fire record.

MERCANTILE AGENCY RATING BOOKS.—In addition to rendering reports in reply to specific inquiries from their clientele, Bradstreet Co. and R. G. Dun & Co. publish **rating books** for general reference regarding capital and credit standing. These books undergo constant revision and are republished quarterly. They purport to list every concern in business, about 2,000,000 in number. Because of the enormous number of listings, it is necessary to condense the available information under two heads, which for further brevity are represented by **symbols.**

The first symbol used denotes the relative capital or "size" of the business; and the second indicates the general grade of credit standing, whether of the the best or not so good. The two ratings are absolutely distinct and bear no

relation to each other. For example, any suspicion that might attach to a merchant's character or manner of paying would not affect his capital rating, but only his credit rating. Thus a large concern may be rated "AA" or "G", meaning that in size it is a $1,000,000 enterprise. The second rating of "1½" or "B", however, would indicate that its willingness and ability to pay its debts was not of the best. Again, the first rating of a concern might be "E" or "S", indicating $20,000 to $35,000 in size, while its second rating of "2" or "C" would signify that its credit standing was excellent.

Figs. 1 and 2 show the symbols used by R. G. Dun & Co. and by Bradstreet Co. The vertical double lines which separate the different grades of credit in these two symbol charts indicate the ratings ordinarily required by credit insurance companies before they will indemnify the shipper against loss.

In many cases it is found impossible to assign both a capital and credit rating, even though the subject pays bills promptly and is recognized as having a certain credit standing in the business community. Very often it is thus necessary to leave the capital blank, assigning only a credit rating. It will to some extent reflect the amount of credit which might reasonably be extended on the basis of all the contributing evidence. Sometimes concerns cannot be rated as to capital or credit. The lack of a rating does not always mean that the subject is absolutely without capital or credit, though it does indicate that the business is not well established.

WHEN TO GET SPECIAL REPORTS.—It is probably safe to rely on high ratings by these agencies as justifying ordinary credit extensions. It is when these agencies indicate that conditions are not the best, or when the credit asked seems relatively disproportionate to a normal amount, that **special reports** must be obtained. The need for further investigation increases precisely as unfavorable conditions are evident. Moreover, adverse information obtained from any other source should evoke further inquiry from the agencies.

When the agency ratings show unfavorably, or when they may show favorably but do not coincide with other information in hand, a special report is necessary if the seller concern is to pass upon the risk intelligently. When it is desired to ascertain the true significance of unfavorable tendencies disclosed by a customer's account on the books of the creditor concern, it is usual to obtain special reports from the outside with respect to the tendency in question.

ABILITY OF MERCANTILE AGENCIES TO FURNISH REPORTS.—The far-reaching organizations of the two large agencies render their ability to furnish reports most effective. By means of their established connections they are prepared quickly to interview a debtor concern, wherever located, and gather much current practical information at first hand. In these cases their **local representative** makes personal inquiry of the concern and of local banks and tradesmen. Their representatives are in a position to observe and hear many things which are important in the granting of credit, and while they endeavor to give weight to these factors in the published ratings, yet the special reports afford them an opportunity to present much detail from which the reader can form his own opinion and thereby grant or refuse credit on the basis of individual judgment. Special reports by bureaus or local credit organizations within the trade have the distinct advantage of bringing to light unfavorable conditions which only the exceptional customer would disclose, and which the larger agencies are unable to get.

RELIABILITY OF CREDIT AGENCY REPORTS.—That agencies do succeed fairly well is shown by the statistics of one which show that of the 111,348 business failures in the past 30 years this company printed 89⅓%

Estimated Pecuniary Strength	General Credit			
	High	Good	Fair	Lt'd
Aa Over $1,000,000	A1	1	1½	2
A+ $750,000 to $1,000,000	A1	1	1½	2
A 500,000 to 750,000	A1	1	1½	2
B+ 300,000 to 500,000	1	1½	2	2½
B 200,000 to 300,000	1	1½	2	2½
C+ 125,000 to 200,000	1	1½	2	2½
C 75,000 to 125,000	1½	2	2½	3
D+ 50,000 to 75,000	1½	2	2½	3
D 35,000 to 50,000	1½	2	2½	3
E 20,000 to 35,000	2	2½	3	3½
F 10,000 to 20,000	2½	3	3½	4
G 5,000 to 10,000	.....	3	3½	4
H 3,000 to 5,000	.....	3	3½	4
J 2,000 to 3,000	.....	3	3½	4
K 1,000 to 2,000	.....	3	3½	4
L 500 to 1,000	.....	.....	3½	4
M Less than 500	.....	.....	3½	4
Blank	1	2	3	4

Fig. 1. Commercial Ratings—R. G. Dun & Co.

Estimated Wealth		Grades of Credit		
G, H	$1,000,000 and above / 500,000 to $1,000,000	Aa	A	B
J	400,000 to 500,000	A	B	C
K	300,000 to 400,000			
L	250,000 to 300,000			
M	200,000 to 250,000			
N	150,000 to 200,000			
O	100,000 to 150,000	B	C	D
P	75,000 to 100,000			
Q	50,000 to 75,000			
R	35,000 to 50,000			
S	20,000 to 35,000	C	D	E
T	10,000 to 20,000			
U	5,000 to 10,000			
V	3,000 to 5,000	D	E	F
W	2,000 to 3,000			
X	1,000 to 2,000	D	E	F
Y	500 to 1,000	E	F	
Z	0 to 500			
Blank		A	B	C

Fig. 2. Commercial Ratings—Bradstreet Co.

with very moderate or no credit, 9⅓% with shaded credit, while the cases actually in error during that period amounted to 1⅓%. In each of the 14 years prior to and including 1900 this percentage of error amounted to 1% or over, reaching 3⅕% in the panic year of 1893. The only years in which the error has since reached 1% were 1903 with 1⅗%, and 1907 with 1⅕%. Four recent years show respectively: 4/5, 3/5, 2/5 and 1/5 of 1%.

These figures, however, are more important from the standpoint of agency efficiency than from the point of view of a credit manager. The credit manager should himself analyze the information and be trained to arrive at correct conclusions as to ratings and credit limits regardless of percentage arguments in support of agency ratings. It often happens that a firm with a high rating begins to go down hill. Later the credit rating is revised downward. At the time of failure the ratings were probably in accord with the status of the company. The real damage happened when the high ratings were accepted as a forecast of the future, whereas they were but statements of the past.

OTHER CREDIT ORGANIZATIONS.—In addition to R. G. Dun & Co. and Bradstreet Co., there have been formed many credit organizations limited to certain trades, industries and localities. The need for these organizations has developed from a desire on the part of credit men to have a "check" against the accuracy of the more general reports of mercantile agencies, and also to bring out detailed and more or less confidential information which only fellow credit men may be willing to impart. Their willingness to impart this information primarily grows out of a sincere desire on their part to strengthen the credit system in general.

There are the National Association of Credit Men, the various state associations, and numerous organizations styled "trade credit bureaus," "reciprocal service bureaus," and other suitable names, some being very extensive in their activities and others being only small groups of men representing their respective houses, who gather at luncheon, say weekly, and enter into a general discussion of credit matters. But by whatever name called, their respective members report in one manner or another their actual experiences with their customers. Incidentally each member thus emphasizes the major importance of ledger experience in connection with credit granting.

DOMESTIC INTERCHANGE BUREAUS.—The state associations of credit men operate interchange bureaus. Most of these bureaus collaborate with a central office conducted by the National Association of Credit Men, forming a national interchange credit system.

The plan of the larger state associations, such as the New York Credit Men's Association, is that all members file with that association a record of their experiences with each of their customers. The members are then supplied with a number of printed forms, one of which is filled out when information is desired on a certain risk. Upon receipt of this inquiry from a member, the association promptly mails an inquiry blank to all other members having dealings with the customer. Replies to these inquiries are in turn received by the Association, are compiled, and the result sent to the inquiring member. It is customary also to mail a copy of the final report to each member replying to the inquiry first sent out.

The function of the central clearance bureau of the National Association is to collect such data from state organizations and compile nation-wide reports therefrom for the better guidance of members doing business in more than one state.

NATIONAL ASSOCIATION OF CREDIT MEN'S RECIPROCAL FORM.—The Association has proposed the form shown in Fig. 3 as adaptable to inquiries concerning ledger experiences. Its use is dependent upon a reciprocal understanding that the concerns making inquiries will likewise reply to those they receive.

TRADE CREDIT BUREAUS.—Many trade associations organize subdepartments for the exchange of credit information. The reports of these bureaus have the advantage of specialization in a given industry and with a more or less limited class of debtors. Some of these bureaus are organized

New York, N. Y., ... 19..

Kindly give us below YOUR EXPERIENCE with

Name.....Business.....

P. O.....

From whom we have.....order for $.....
(Indicate whether first order)

ALL INFORMATION WILL BE CONSIDERED STRICTLY CONFIDENTIAL

Yours truly,

APPROVED AND ADOPTED BY
NATIONAL ASSOCIATION OF CREDIT MEN

To.....
.....

Sold since.....To.....		MANNER OF PAYMENT ANSWER—YES OR NO
Terms.....	....	Discounts
Largest amount owing recently.....$.....	....	Prompt and satisfactory
Total amount now owing.....$.....	....	Slow but collectible
Amount past due.....$.....	....	Slow and unsatisfactory
Other information.....	....	Days slow
.....	....	Accepts C. O. D.'s promptly
.....	....	Settles by trade acceptances
.....	....	Account secured
.....	....	Notes paid at maturity
.....	....	Makes unjust claims
.....	....	Collected by attorney

RETURN THIS TO US

FIG. 3. Reciprocal Credit Service Blank—National Assn. of Credit Men

erely to exchange experiences, while others have arranged to compile statistics repared from financial reports, etc. Their service in either case is greatly nhanced by whole-hearted co-operation on the part of the members.

ADVERSE LISTINGS.—Several of the trade credit bureaus devote the reater part of their attention to the issuance of publications of concerns in ood credit standing, and other publications of concerns not in good standing. The latter publications show in code the actual ledger experiences of the mem- ers with delinquent debtors. For instance, John Somebody & Co. is reported y name, accompanied by the letters and numerals, say A-4, B-5, D-2. Each itation refers to a member's experience; each letter indicates the size of the ccount reported, as $100, $500, or $1,000; and the figures indicate whether the ccount was charged off as a bad debt, given to attorneys, is disputed or is nerely slow.

LOCAL INTERCHANGE BUREAUS.—One of the most helpful bits of nformation concerning a customer is a knowledge of the manner in which he ays your immediate neighbor from whom he also buys or borrows. This nformation can be obtained most readily and accurately only from that neigh- or. The desire for this particular information is largely responsible for the levelopment of the local interchange bureaus. Such bureaus are merely ssociations or groups of local concerns, dealing with a definite class of customers, rho exchange their experiences with one another. Their interest is usually estricted to a particular community or locality.

The theory of this local service is identical with that of the larger organiza- ions, in that each member submits from time to time reports on the manner n which his credit customers are paying. It has been thought that these eports should include the particulars of all purchases each customer had made, hus preventing any customer from obtaining a large line at several places, but his particular objective has not met with complete success. The simple plan f reporting only the total sum owing from a delinquent customer and his nanner of paying is about all of the information that can be obtained through his source. The operation of these bureaus is somewhat more simple than in he case of the larger organizations, although there is no restriction on the scope f their activities other than the individual preferences of the members.

FOREIGN CREDITS.—The National Association of Credit Men has devel- ped a **Foreign Interchange Bureau** of very wide scope for the purpose of athering and reporting on foreign credit risks.

In addition to experience and financial reports, the bureau keeps its members nformed on **unethical practices** of foreign merchants and on economic condi- ons affecting credit in the foreign countries. It also offers facilities for the xchange of information concerning important points in foreign trade technique nd foreign credit practice.

(For further treatment on foreign credits see Section 15.)

ATTORNEY REPORTERS.—The Martindale Mercantile Agency and everal other companies publish books containing the names of attorneys roughout the United States from whom subscribers to their service may btain credit reports. The attorneys listed hold themselves out as offering pecial services in making collections for the subscribers. The agencies also epresent that the attorney's listed by them are trustworthy and, as a rule, hat they are bonded in the interests of their subscribers. It is almost imper- ive, however, to submit specific guiding questions to the attorneys if their ports are to be of the greatest advantage.

CORPORATION MANUALS—Poor's and Moody's.—Each of these manuals is published annually and covers railroads, large industrials, and public utility concerns. In each is found the most recently available income statements and balance sheets, a summary of past financial statements for several years, and a description of the important assets. They contain also a brief history of the formation and development of the corporations.

TRADE AND BUSINESS NEWSPAPERS, FINANCIAL AND ECONOMIC MAGAZINES, AND CREDIT PUBLICATIONS.—In these are to be found information of considerable value respecting conditions in particular lines of business, the trend of general financial and economic forces, as well as articles of an educational nature. *The Credit Monthly*, organ of the National Association of Credit Men, the most widely read credit periodical, publishes items of personal and general interest to credit men, and also instructive articles on credit methods, legislation, and problems affecting the work of the credit man.

The trade and business papers print, besides news of a general character, items of specific interest; such as incorporations, changes in business names, changes in personnel and organization, changes in capital, litigation, receiverships and bankruptcies, court decisions; and news items pertaining to particular lines of trade, business and finance.

BUSINESS REVIEWS AND BAROMETRICS.—The mercantile agencies, monthly letters issued by a number of the commercial banks, and reports compiled and issued by the United States government, and also private institutions and companies, give reviews of basic business and financial conditions and statistics indicating business and financial tendencies.

Granting Credit

THE CREDIT RISK.—Sound credits are vital in business building, and the desire for increased business and profits must not tempt the seller to extend credit carelessly. The loss of $5,000 may mean that the net profits on sales aggregating $50,000 have been lost. The questions that arise in every normal sale made on a credit basis are: Is the credit good? Will the customer be willing and able to pay as he promises? A small proportion of the average run of applicants for credit may be quickly disposed of as (a) unquestionably good, or (b) utterly worthless. The troublesome portion will be found between these two extremes.

In reckoning the worth or worthlessness of these intermediary hazards, the credit man should first apply the basic policies of his concern. Thus the liberal credit policies of concerns organized on the basis of large-scale production, engaged in keenly competitive lines, dealing in commodities yielding big profits, or having its credits so widely broadcast as to be able to rely somewhat on the law of averages, will admit to probable consideration many risks which the policies of a more conservative or limited organization would immediately exclude. Conversely, the concern which occupies a somewhat monopolistic position by reason of its dealings in patented or copyrighted goods, or one dealing in goods which carry a small margin of profit, such as staples, must be more exacting and exclude many risks which other concerns or specialty houses would be glad to assume.

The acceptability of a risk is finally to be determined from a consideration of the **character, capacity** and **capital** of the applicant. Is he honest and trustworthy? and what is the nature of his business or vocation? What are his present financial condition and his earning power?

. will be found true always that some excellent risks will fail, and some poor sks will ultimately succeed. Experience shows, however, that these are the ceptions and not the rule.

ELEMENTS OF CREDIT RISKS.—All credit risks consist of **two major elements: character** (willingness to pay), and **present worth and earning power** (ability to pay).

DOUBTFUL CREDIT RISKS.—Suppose that A is honest and has some money but is not working. This is not the best grade of risk because the ability to pay is affected by lack of earning power. B may be honest and also working, but is a subnormal credit risk if he has no security to offer, and the payment of his debt is contingent largely on the successful outcome of his future operations. C, a third type, is wealthy and making money, but is a poor risk because of his known dishonesty. He will be unwilling to pay although he could readily be compelled to do so. To sell to him on credit is merely inviting a law-suit.

GRADING CREDIT RISKS—POSITIVE ATTITUDE.—By taking a positive rather than a negative attitude, the risks are graded as follows: A, who is honest and has some money but who is not working, may be considered an acceptable risk if only a limited line of credit is desired, or if his present wealth appears to be sufficient to overcome his lack of income, or if his present idleness is deemed to be merely a temporary condition. B, who is honest and is working, but who has no wealth, may be deemed a favorable risk for a reasonable amount if his ability to make money and his prospects are considered to be proportionate to the credit required. And, C, who is wealthy and industrious, but dishonest, may possibly be developed into a satisfactory credit risk by tying him up with written contracts such as trade acceptances or notes, or, if necessary, by obtaining a pledge of property as security or by retaining liens on the goods sold. It is true that he represents the most undesirable class of credit applicant. He is most difficult to deal with and it is never known what unfair tactics he will resort to. His business is not desirable and possibly should be refused, but experience shows that his account has possibilities. Adequate precautions may be taken to justify the extension of credit on a risk of this character.

GRADING CREDIT RISKS—NEGATIVE ATTITUDE.—A negative view of the foregoing illustrations may be taken and the risks graded as follows: A, who is honest and has some money but who is unemployed (has no earning power) is an undesirable risk, since the terms on which credit is desired may mature beyond a time when his capital will have become impaired. B, who is honest and is working, is undesirable as a credit risk for any substantial amount because there is no wealth behind his venture with which to offset setbacks that may be encountered. C, is dishonest, and for this there is no excuse, as sound credits can be built only on confidence and integrity.

ANALYSIS OF FINANCIAL STATEMENTS.—Upon receipt of a statement submitted as a basis for credit, the credit manager's **first problem** is to ascertain the probability that the concern will be **able to pay its bills as they mature and next,** the **opportunity for forcing settlement** if that should become necessary. Usually it is sufficient to rely on the fact that the concern has **current assets in excess of current liabilities,** i.e., that it has at the settlement date sufficient cash, accounts receivable and inventory to meet its liabilities as they mature. This is where the banker gets his **2 : 1 ratio.** He assumes in favorable cases that $2 will be received in the normal turnover of current assets against every

$1 of debt that matures, and that the margin of $1 is an assurance of solvency, or that current debts will be paid as they fall due.

It is, however, the concern with limited current assets, and perhaps a burdensome debt, that comes more often to the attention of the credit manager, and that condition requires a closer analysis of the situation. To the same extent as current assets are proportionately smaller, the credit risk increases. As this risk becomes more and more in evidence, the credit manager must decline the business or reckon with the causes of that condition and the probability of its being overcome.

To form correct conclusions it is necessary for the credit manager to have a clear understanding of the meaning of the various items included in the financial statement.

DETERMINING THE AMOUNT OF CREDIT.—Assuming that the working capital (excess of current assets over current liabilities) has been ascertained to be favorable to a line of credit, what amount shall be extended? The **line of credit** should be limited by the relative proportion that the seller's goods bear to the entire business. If the free working capital is $300,000 and the seller's line of goods constitute, say, one-fifth of the entire stock carried, the maximum credit limit would be $60,000. Experience shows that a rule of this kind is rarely if ever actually adhered to. Practically every case is judged on its merits. The human element is always present, and traders will "take a chance." The credit manager must do more or less guessing, and his value as a credit manager depends largely on his ability to "guess right" in setting credit limits. This is especially true in connection with retail trade.

FACTORS GOVERNING TERMS OF CREDIT.—The essential factors governing the terms on which goods will be sold may be classified as follows:

1. Nature of the commodity sold.
2. Class of trade served.
3. Location of customers.
4. Competition encountered.

The credit manager considers in connection with the nature of the commodity, whether the sale (or the account) involves a large or small amount, whether the goods are perishable, staple or seasonal, the margin of profit involved, and the prospects for trade stimulation.

Practically every business finds it satisfactory to adopt the terms prevailing for its particular line of business or class of trade. Small tradesmen find the weekly and monthly terms, without discounts, of advantage because they coincide with pay days. Hardware dealers and mill work houses offer endless trade and cash discounts. The "general store" of the rural districts must carry its farmer customers from crop to crop. The manufacturer and the exporter often require unusually long terms in order to facilitate their trade. Jobbers and wholesalers in dry goods lines take orders and ship goods 30, 60 or 90 days before the season in which the goods are to be sold. Their regular credit terms of 30, 60 or 90 days are in such cases advanced to begin on a set date, such as April 1 or May 1 in the spring, enabling the retailer to get the goods on his shelves and sell from them before paying for them.

DISCOUNTS.—Discounts are of **two distinct types:** trade discounts and cash discounts.

The trade discount is a method by which the manufacturer may protect a wholesaler or jobber from the retailer and by which he may at the same time change his price lists without reprinting his catalogues. The goods are listed in the catalogues at a maximum (list) price, and the manufacturer furnishes each customer, according to whether he is a jobber or retailer, with a list of

trade discounts applicable thereto. Trade discounts are very effective in regulating prices as between the various classes of customers. At times they seem almost pernicious. Many concerns of somewhat monopolistic tendencies have the "trade" so completely catalogued that they set prices on sales several removes from the first transaction.

The computation of trade discounts is illustrated as follows: For instance, if the list price of an article is $100, less trade discounts of 50%, 25% and 10%, the actual price is $33.75, thus:

List price	$100.00
Less, 50% discount	50.00
	50.00
Less, 25% discount	12.50
	37.50
Less, 10% discount	3.75
	$ 33.75

Cash discounts are deductions from the price allowed if the bill is paid before its due date. The cash discount is always more than the interest for the same period would amount to. All buyers should take advantage of it.

When a customer fails or neglects to take advantage of cash discounts, i.e., when "he does not discount his bills," that fact is generally reckoned as a sign of financial weakness, and the alert credit manager forthwith curtails the credit.

Collections

IMPORTANCE.—Granting credit enables a merchant greatly to increase his sales, but to conserve its benefits he must be a good collector, quickening the turnover of his capital and minimizing the risks. A capable collector is an invaluable ally of the credit department. Careful and sound as the credit man may be, misconceptions are bound to creep in, and accounts good at the time the credit was passed upon may retrograde. The weakened condition may be reflected in tardy payments and it behooves the collector to effect the payment before it is too late. Furthermore, the collector is concerned with more than the duty of inducing delinquent customers to pay. He must be broad-gauged enough to realize that not infrequently desirable accounts find themselves unable to meet their obligations promptly and that while no proper efforts must be spared to make the collection as early as possible, he must avoid doing anything to offend and lose the account. In other words, the aim of the qualified collector is not only to collect but also to retain for his house the goodwill of a good account.

The efforts of all other departments of a business organization are rendered useless and of no effect if the collection department fails to collect accounts. It is not enough to collect the accounts **sometime;** they **must be collected with reasonable promptness,** if the working capital of a business is to function properly and profitably.

Collection problems are simplified by the one and only rule of **prompt, regular follow-up.** From the moment an account is past due, collection resistance is encountered, and must be overcome. Unrelenting regularity will overcome it.

THE COLLECTOR.—The skilful collector requires as much inspiration, as much encouragement and support, as a good salesman. The salesman is usually helped by the attractive or useful commodity he shows, or by the demand existing with the prospect, but the collector has no such aids. There

is considerable difference between talking a man into receiving something, and talking him into parting with something.

Certain conditions and suggestions will produce certain effects on the mind of any individual and will almost invariably lead to the same results, modified by the restrictions of surrounding circumstances. Therefore, if it is known who a man is, what his circumstances are (what he has), and what kind of merchandise or service was sold to him by the house, the collector should be able to tell to some degree what the mental attitude of that man should be toward his bill. It is the task of the skilful collector to be sufficiently acquainted with the facts in the case to know what the mental attitude of the customer under normal conditions should be, and then know what steps to take which will cause that customer to part with his money, if possible, willingly.

THE PLANNED APPEAL.—To deal with a man's mental attitude one must first of all, to use a selling term, get a point of contact. This is needed to secure real attention. Then, if the power of habit is known and how to use that power, or how to appeal to a man's reason, motives, instincts, emotions, pride, sense of honesty, etc., spontaneous, automatic response may usually be secured. Also, the power of suggestion that will set the subject's imagination to work should not be overlooked. And here the indirect or implied action is often more effective than the direct. For instance, a statement that certain actions on the part of the customer will compel the creditor to use other means to collect, will be found to have a far better effect on the customer (and in many cases secure the desired result) than when a direct statement is made that unless he does so and so the creditor will take certain steps. The former phrase leaves a great deal to the customer's imagination, but the latter does not, and he will invariably resent the threat and prepare to defend himself as best he can. Of course, if he is scared at the threat he will pay, but very few are scared at such a threat when this stage of operations has been reached. There is much to be said in favor of the warning sent by a chinaman to a delinquent debtor: "If you do not pay at once, I will do something which will cause you the utmost astonishment."

The really good collector or correspondent **should study his customer,** and should know or try to learn something of his station in life, his business or occupation, his habits of living, buying, paying and thinking. To do this and at the same time handle a large volume of correspondence requires the smooth operation of an adequate system.

RETAINING THE GOODWILL OF THE CUSTOMER.—One main thought must be uppermost in the minds of the credit manager and the collector when an attempt is being made to collect the account and still **retain the goodwill of the customer.** It is one of the greatest secrets to successful collecting. It is so simple that most collectors never even think about it, but mechanically continue their humdrum methods of annoying perfectly good customers to no constructive purpose, but more frequently destructive. In determining a man's credit standing, the problem is reduced to three general questions, always to be asked and answered. In collecting the problem is reduced to one general question. When an account is overdue and unpaid, the question should be asked "Why?" Then steps to find out "why" should be taken. And in finding out "why," a study should first be made of the account, the records of the transaction, the credit records of who the customer is, what he has and his previous reputation for paying obligations, and then the correspondent should draw upon his imagination, by putting himself in the customer's place, and then acting accordingly.

FOLLOW-UP PROCEDURE.—The collection follow-up should provide a definite collection routine. Reminders of indebtedness (duns) must be prompt and regular. Without the characteristics of promptness and regularity dunning statements and letters are merely excessive overhead expense and annoyance to both parties. As elementary as these thoughts may seem, the essence of successful dunning is promptness and never failing regularity. Once begun, the collection follow-up should be ceaseless until the account is collected, adjusted or written off.

Slowness of payment, which first brought an account up for the collection follow-up, may be due to a temporary lack of funds, misfortune, unforeseen happening or to supposed dissatisfaction with the goods or service. As the accounts overstep the bounds of slow pay **the first collection effort** should be tactfully worded so as to give no possible ground for offense, in case of the existence of any of these conditions. The first reminder may well be worded as a mere statement that a remittance has been withheld and conclude by inviting the customer to disclose the reason, whatever it may be, thus enabling the creditor concern to apply a remedy or some form of relief in conformity with the house policy of service and helpfulness. Thereafter, **the follow-up** must become more insistent, particularly if no reply is forthcoming. The burden of proof is thereafter on the debtor to show cause why he should not be forced to pay. He knows his credit standing will fail unless he pays his debts. The **final step** is to arrange for legal intervention, and there need be no hesitancy about it. **Intervening appeals** may be made concerning good-will towards the house, a sense of justice and fair play, a sense of honor and business obligation, and a sense of responsibility. If no correspondence develops, taking the account out of the regular follow-up, the system should provide for legal steps.

COLLECTION CORRESPONDENCE.—Collection correspondence should affect some show of individuality, and must create an impression of efficiency, co-operation, sincerity, and individual attention. Printed or mimeograph letters are not helpful. **"Trick" correspondence and "smart" methods** are of doubtful value. They are out of place with houses of good reputation and dignity, having a dependable line of goods for sale. Sane, personal letters, approaching the problem from the customer's particular viewpoint in so far as feasible are much to be preferred.

Good **collection letters** will hold attention during the period of deliberation between the time the letter is read and action is taken on it.

It is more effective to couple some high motive with all collection letters. Not that the motive should be mentioned, but the customer's attitude towards "fair play," for instance, must be stirred. Another motive that many men act upon is that of responsibility. This man does not like to feel that his practices are interfering with his community trade association or club. It is necessary to challenge some customers on the ground of approval and admiration, as a reputation for prompt payment unsullied through the years often begets action.

Some men will yield to an appeal to rivalry, the desire to surpass others in relative position and integrity.

Personal friendliness and sympathy on the part of the letter writer will appeal to the customer after he bought, precisely as it aided in persuading him to buy in the first instance. Even when drastic methods are resorted to, they should never be used without due regard to the retention of the customer's good-will. Some firms find that the mere sending of telegrams and registered letters of itself aids in begetting action on the part of some debtors. But they

should never precede a number of courteous, dignified, well written personal letters.

The collection telegram suggesting urgency has considerable psychological value. In using it, however, one must avoid liability under the laws against libel and extortion. The telegram should not contain a threat of bankruptcy or criminal prosecution. Following up a strong collection letter, the telegram, however general or cryptic its wording, very often does get the desired result.

LAWS OF VARIOUS STATES RELATING TO CREDIT MATTERS.—The laws of the various states relating to credit matters are **substantially similar,** yet there are many important **differences in their particulars.** This is equally as true with respect to the statutes concerning credits and collections as with other branches of the law. Statutes such as the Uniform Bills of Lading Act, Conditional Sales Act, Uniform Negotiable Instruments Law, Partnership Act and general statutes concerning liens, contracts, etc., have been adopted by many of the states, but not without important variations. Perhaps the most practical source of information concerning the substance of these laws as well as their variations readily available to credit men is the digest of the statutes published in the **Credit Men's Manual of Commercial Laws.**[3]

The financial manager, or his credit staff, must be familiar with these laws, more especially of course if the concern is trading in different states. It being obviously impracticable to recite these laws and their variations in a work of this character, it is suggested that no concern become involved in extensive credit arrangements in foreign states until the circumstances of the trading have been discussed with an attorney, or fully investigated through some established credit agency competent to advise in such matters. Even when trading is carried on within one state only, the need for familiarity with the principal phases of these laws in that state is essential to the welfare of the creditor concern. Knowledge of such laws becomes more and more vital as collections become more difficult, particularly when requiring legal processes to enforce payment or to recover goods.

In the section on Business Law will be found a general treatment on various phases of law of interest to the credit manager.

TRADE ABUSES.—With the tendency among business men to develop a professional spirit and to put business on an actual scientific basis, there has come a classification of many "sharp practices" that escaped criticism heretofore as being merely "tricks of the trade." Nowadays these practices are more properly considered as "trade abuses" and they are frowned upon as insidious attacks upon the integrity of business. Some of these practices are as follows:

Taking of unearned discount.
Resenting charges for interest on overdue accounts.
Claims for shortage and breakage in transit.
Cancellations.
Return of goods after display by buyer.
Deduction from remittances without notice or reason.
Defective remittances, designed to delay payment.

Every credit manager has met these trade abuses. Through the National Association of Credit Men, much is being done to counteract these conditions. Trade associations are lending a helpful hand in controlling the situation within their trade or industry.

[3] Brewster, Legal Aspects of Credit, published by The Ronald Press Co., New York, includes an excellent commentary on these laws.

SECTION 18

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SECTION 18

DEALINGS WITH EMBARRASSED DEBTORS

PURPOSE OF SECTION.—The purpose of this section is to present suggestions and possible procedures to financial executives who may have business relations with embarrassed or fraudulent debtors, or who may find their concerns facing unusual financial difficulties.

The term "financial difficulties" is hard to define with such clearness and completeness as to be universally applicable and acceptable. The term is relative and what may be considered financial difficulties in one concern may not be considered such in another. To some a temporary lack of available cash or credit resources to meet maturing liabilities will be construed as financial difficulties, even though the concern has ample assets, which, however, consist of plant, equipment, inventory, or slow but good accounts receivable. In this section the term "financial difficulties" is not used in that sense but rather as meaning the inability of a business to pay its debts, even though it eventually realizes full value on all of its assets. Such a condition is generally understood to be a state of insolvency.

REMEDIES AVAILABLE.—As a general proposition it is more economical and satisfactory to both debtors and creditors to have financial difficulties **settled amicably,** through co-operation, extensions, adjustments, or even reorganizations, than to resort to bankruptcy. This fact is becoming recognized among business men with the result that, more than ever before, concerns which are in financial difficulties are being conducted by **creditors' committees;** or if that is impossible, administered through **receiverships in equity. Bankruptcy** should be resorted to only as a last resort, and then only in cases of fraud, hopeless insolvency, or for some other equally substantial reason.

Insolvent concerns require unusual consideration. The specific remedy in each case will be governed by individual circumstances. Frequently it is necessary to reorganize the concern's financial structure through extensions and refinancing; or to compromise with the creditors through composition and assignment; or to continue the business under a committee of creditors, or through a receivership in equity, with a subsequent reorganization; or, even as a last resort, to discontinue the business and wind up its affairs through bankruptcy.

Insolvency

DEFINITION.—Insolvency in its general and popular meaning denotes the state of one whose entire assets, when converted into money in the usual course of business and without unusual haste and sacrifice, are insufficient to pay his debts. (Held so in *Lansing Boiler Works* v. *Ryerson*, 128 Fed. 701.)

"When a person is unable to pay his debts, he is understood to be insolvent.

It is difficult to give a more accurate definition of insolvency." (*Cunningham* v. *Norton*, 125 U. S. 77.)

The Bankruptcy Law states that "a person shall be deemed insolvent within the provisions of this act whenever the aggregate of his property exclusive of any property which he may have conveyed, transferred, concealed or removed, or permitted to be concealed or removed with intent to defraud, hinder or delay his creditors, shall not at a **fair valuation,** be sufficient in amount to pay his debts." (Section 1 (15), Federal Bankruptcy Law.)

FAIR VALUATION AS DEFINED BY THE COURTS.—"Fair valuation . . . . means a value that can be made promptly effective by the owner of property to pay his debts . . . . such a value excludes, on the one hand, the sacrifice price that would result from an execution or foreclosure sale, and on the other hand, the retail price that could be realized in the slow process of trade. This latter value should be excluded because it could only be gained by large expense and the many risks of a mercantile venture. 'Fair valuation' means such a price as a capable and diligent business man could presently obtain for the property after conferring with those accustomed to buy such property. Such a value will depend upon many circumstances, such as the age and condition of the stock, the season of the year, and the state of trade." (*Stern* v. *Paper*, 183 Fed. 228.)

"The **fair market value** of a corporation's assets, for the purpose of determining its solvency when it committed an alleged act of bankruptcy, was the value which the corporation might have realized on them for itself." (*In re Marine Iron Works*, 159 Fed. Rep. 753.)

DUAL MEANING OF INSOLVENCY.—"The insolvency intended by the statute was, in my opinion, an **actual or absolute insolvency,** by which is meant an inability of the company to pay all its debts from its own property. Another meaning is sometimes accorded to this term, especially in cases arising under the bankrupt act, viz., an inability of the debtor to pay all his debts as they become due, in the ordinary course of trade, as contradistinguished from the ultimate sufficiency of his property to pay all his debts upon the final liquidation of his affairs. The former is its primary or derivative, as well as its popular and literary signification. This is also its meaning, when contained in statutory provisions in relation to the frauds of insolvent debtors, except in cases where it is declared that a different meaning is intended." (*Curtis* v. *Leavitt*, 15 N. Y. 9, 200.)

The books of accounts and balance sheet of a concern do not necessarily reflect its true financial status. The facts alone govern. In *United States* v. *Guggenheim Exploration Co.*, 238 Fed. 231, it is stated: "The net income of a corporation is not to be determined by bookkeeping facts, but by real facts. The bookkeeper creates nothing; his methods, figures and records must yield to proven and established facts."

BUSINESS FAILURES AND THEIR CAUSES.—The well known credit reporting agencies of R. G. Dun & Co. and The Bradstreet Co. have for a number of years collected statistical information on business failures. The following is reprinted from "*Bradstreet's*" *Journal* of January 31, 1925:

What a Business Failure Is.—' Bradstreet's definition of a business failure is that it must involve some loss to creditors of individuals, firms or corporations engaged in ordinary commercial operations. Under this classification, failures of professional men, such as physicians, lawyers and actors, as well as of stock-brokers and real estate dealers, also old bankruptcies passing through the United States courts, have no place. Most or all of these may be, in fact

generally are, dissociated from the recognized commercial life of the country and are not included in Bradstreet's failure data. Failures to succeed without loss to creditors are, of course, not embraced in Bradstreet's returns. On the other hand, it should be clearly borne in mind that these statistics do include suspensions of banks and other strictly financial institutions even if these suspensions prove only temporary. For these and other reasons, comparisons of the failure reports made up by Bradstreet's with those issued by others cannot properly be made."

The Personal Element.—"The importance of the personal element in business had been, of course, stressed for many years previous to the time that Bradstreet's first gave a statistical basis for the frequently expressed theories that a man himself was mainly responsible for success or failure in commercial life. In 1918 the proportion of failure credited to causes which are classed as originating within the individual himself rose to its highest point, 86%, while outside influences were credited with causing 14%, and the 1919 returns were almost identical with these. In 1920 the proportion due to personal causes fell to 83.1, but in 1921 the failing trader, comparatively speaking, seemed to become a child of circumstances, many of them beyond his control, only 74.8% of the 1921 failures being due to the individual, while 25.2% were beyond his control. In 1922 the proportion chargeable to the individual was 76.8%, while 23.2% was attributed to outside causes. In 1923 the personal element was charged with 80.8% of all failures, while the non-personal causes dropped to 19.2%, and the percentages may be said to have remained static in 1924, when they were respectively 80.7 and 19.3.

"Fully to understand the references to personal and non-personal causes of failure, it will be advisable to examine Bradstreet's groupings of the causes of failure proceeding from or inherent in the individual as compared with those outside of his control:

A: Due to Faults of Those Failing:

Incompetence (irrespective of other causes)
Inexperience (without other incompetence)
Lack of Capital
Unwise Credits
Speculation (outside regular business)
Neglect of Business (due to doubtful habits)
Personal Extravagance
Fraudulent Disposition of Property

B: Not due to Faults of Those Failing:

Specific Conditions (disaster, war, floods, etc.)
Failures of Others (of apparently solvent debtors)
Competition."

What Causes Failure.—"From 1890, when these causes of failure records were first compiled, down to 1912, lack of capital was the outstanding single predisposing element in bringing about business failure. In 1912 incompetence forged to the front, but fell behind again in 1913 and 1914. From 1915 onward until 1923, however, **incompetence** led, but in 1923 **lack of capital** again took first place with a percentage of 34.2% as against 33.7% for incompetence, claiming the highest percentage of failure since 1909. In 1924, however, incompetence again forged to the front with 34.4% as against 33.3% for lack of capital; and if inexperience, itself a form of incompetence, charged with 4.7% of all 1924 failures, were combined with incompetence, it is safe to say that this

latter cause would have led all the other causes in most of the past dozen or more years. **Fraudulent disposition,** with 3.8% of all failures charged to it, was the next most important personal cause. Incompetence alone of the causes above cited seems to have increased in influence in 1924 as compared with 1923, although some of the less important causes, such as **speculation, extravagance and neglect,** also claimed more victims. The leading non-personal cause is and always has been specific conditions, under which are grouped outside happenings—floods, fires, crop disasters, trade depressions, etc. This in 1924 claimed 15.9% of all failures, as against 16.3% in 1923 and 20.9% in 1922. Competition rose in importance in 1924 with 1.9% of all failures, the heaviest proportion since 1916."

Capital, Liabilities and Credit Ratings.—"One conclusion that may be drawn from the statistics compiled as a result of consideration of the capital employed, the liabilities rolled up and the credit ratings assigned to those failing in 1924, is that the liabilities were larger than either the capital employed or the credit ratings that were extended justified. Thus, 90.1% of the 22,024

Failures, Assets, Liabilities and Number in Business in the United States Yearly Since 1893

Year	No. of Failures	Per Cent Increase or Decrease	Actual Assets, Millions	Total Liabilities, Millions	Per Cent Assets to Liabilities	No. in Business	Per Cent Failing
1924	19,712	+ 2.8	$419.7	$694.8	60.4	2,195,626	.89
1923	19,159	− 14.5	369.1	631.2	58.4	2,136,921	.89
1922	22,415	+ 11.9	365.6	649.8	56.2	2,074,617	1.08
1921	20,014	+136.4	446.6	755.7	59.0	2,049,323	.97
1920	8,463	+ 53.4	274.1	426.3	64.3	1,958,042	.43
1919	5,515	− 40.8	55.3	115.5	47.9	1,843,066	.29
1918	9,331	− 28.3	69.3	137.9	50.9	1,824,104	.51
1917	13,029	− 21.0	84.8	166.6	50.9	1,828,464	.71
1916	16,496	− 13.3	86.1	175.2	49.1	1,790,776	.92
1915	19,035	+ 13.4	160.8	284.1	56.5	1,770,914	1.07
1914	16,769	+ 15.2	197.2	357.1	55.2	1,749,101	.95
1913	14,551	+ 5.3	159.0	292.3	54.3	1,718,345	.84
1912	13,812	+ 9.2	98.5	198.9	49.5	1,673,452	.82
1911	12,646	+ 9.2	102.0	188.1	54.2	1,637,650	.77
1910	11,573	− 2.3	94.2	188.7	49.8	1,592,509	.72
1909	11,845	− 15.6	69.3	140.7	49.2	1,543,444	.76
1908	14,044	+ 36.8	168.4	295.9	56.9	1,487,813	.94
1907	10,265	+ 9.3	287.9	383.7	75.0	1,447,680	.70
1906	9,385	− 5.9	63.1	127.2	50.0	1,401,085	.66
1905	9,967	− 4.3	65.0	121.8	53.3	1,352,947	.73
1904	10,417	+ 6.5	75.7	143.6	52.7	1,307,746	.79
1903	9,775	− 1.9	84.1	154.3	54.5	1,272,909	.76
1902	9,973	− 6.3	50.4	105.5	47.7	1,238,973	.80
1901	10,648	+ 7.4	61.1	130.1	46.9	1,201,862	.88
1900	9,912	+ 2.8	60.1	127.2	47.2	1,161,639	.85
1899	9,642	− 16.9	60.1	119.8	50.1	1,125,873	.85
1898	11,615	− 11.2	73.1	141.6	51.6	1,093,373	1.06
1897	13,083	− 13.3	86.5	158.7	54.5	1,086,056	1.20
1896	15,094	+ 16.4	147.8	246.9	59.9	1,079,070	1.40
1895	12,958	+ 1.8	87.6	158.7	55.2	1,053,633	1.23
1894	12,724	− 17.9	83.2	151.5	54.9	1,047,974	1.21
1893	15,508	+ 51.0	231.5	382.1	60.6	1,059,014	1.46

individuals, firms or corporations failing had not to exceed $5,000 capital or less than that amount, and 95.9% had a **very moderate or no credit rating;** but, nevertheless, 60% of them were able to fail owing $5,000 or more in the shape of liabilities. As to capital and liabilities, this showing does not greatly differ from recently preceding years; but as regards credit ratings, it may be observed that a perceptible loosening of credit is portrayed in the fact that the percentage failing in 1924 with very moderate or no credit was 95.9%, as against 95.5% in 1923, 95.1% in 1922 and 92.8% in 1921. These statistics would seem to bear out, partially at least, the assertion frequently made that credit is rather easily obtained in this country."

Failures in the United States and Canada

CLASSIFIED ACCORDING TO CREDIT RATINGS, TO LIABILITIES AND TO CAPITAL EMPLOYED

	1924		1923		1922		1921	
	No.	%	No.	%	No.	%	No.	%
Credit Ratings of those who failed								
Total number failures U. S. and Canada	22,024	100.	22,120	100.	25,662	100.	22,409	100.
Number failing which had Very Moderate or No Credit rating	21,124	95.9	21,130	95.5	24,408	95.1	20,793	92.8
Number failing rated in Good Credit	817	3.7	925	4.2	1,158	4.5	1,425	6.4
Number failing rated in Very Good Credit or higher	83	.4	65	.3	96	.4	191	.8
Liabilities of those who failed								
Total number failures U. S. and Canada	22,024	100.	22,120	100.	25,662	100.	22,409	100.
Total with less than $5,000 liabilities	8,813	40.	8,650	39.1	10,270	40.	8,769	39.1
Total with $5,000 liabilities and over	13,211	60.	13,470	60.9	15,392	60.	13,640	60.9
Total with $5,000 to $20,000 liabilities	8,783	39.9	8,865	40.1	10,168	39.6	8,690	38.8
Total with $20,000 to $50,000 liabilities	2,406	10.9	2,558	11.6	3,161	12.3	2,765	12.3
Total with $50,000 to $100,000 liabilities	887	4.	945	4.3	1,116	4.4	1,050	4.7
Total with $100,000 to $500,000 liabilities	912	4.2	930	4.2	800	3.1	940	4.2
Total with $500,000 liabilities and over	223	1.	98	.4	147	.6	195	.9
Total with $1,000,000 liabilities and over	99	.4	74	.3	73	.3	97	.4
Capital employed by those who failed								
Total number failures U. S. and Canada	22,024	100.	22,120	100.	25,662	100.	22,409	100.
Total with $5,000 capital or less	19,844	90.1	20,225	91.4	23,230	90.5	19,730	88.1
Total with over $5,000 and less than $20,000	1,557	7.1	1,408	6.4	1,761	6.9	1,849	8.3
Total with $20,000 and less than $50,000	414	1.9	317	1.4	472	1.8	564	2.5
Total with $50,000 and less than $100,000	113	.5	101	.5	134	.5	165	.7
Total with $100,000 and less than $500,000	75	.3	53	.2	62	.3	85	.3
Total with $500,000 and over	21	.09	10	.05	2	.....	16	.07
Total with $1,000,000 and over	7	.03	6	.04	1	.....	7	.03

SOME SPECIFIC CAUSES OF INSOLVENCY.—**Excessive operating costs** is one of the principal specific causes of insolvency. Financial executives should analyze the costs of production, reducing them to a unit basis wherever possible and compare component elements of one period with another in order to locate the cost items which are excessive. Such inquiry would reveal whether costs and expenses can be reduced, or whether it is necessary to increase the volume of business, revise major business policies or make personnel adjustments. Contact with competitors through trade associations which make a study of such problems, is often a means of solving operating, cost, and distribution problems.

LACK OF CAPITAL.—The amount of capital required by a concern is governed by a number of factors such as, the nature of the business, the volume of trade, the terms of credit allowed in purchases and sales, the time it takes to manufacture and sell the products, as well as the type and the amount of investment necessary in plant, machinery and inventory. All of these elements should be considered in determining the amount of capital a business should have for effective operation. Often excessive amounts of capital may become tied up in plant, inventories, slow or bad accounts, frozen investments or similar non-liquid items.

OVER-EXPANSION.—Insolvency is often due to over-expansion which is merely another form of **poor capital apportionment.** Over-expansion with reference to capital assets is frequently the result of obtaining more business than the concern can handle with its present facilities and attempting to meet the situation by enlarging its plant, machinery and equipment. When a concern expands beyond the safe limits imposed upon it by its available working or current assets, it tends more and more to **divert working capital into fixed** assets and finally reaches a point, if care is not exercised, where it cannot raise sufficient cash to meet its maturing obligations.

Banks are not free from blame in encouraging over-expansion. When business is good and profits are large, short-time loans are easily secured. When the profits left in the business are not sufficient to finance additional capital outlays the proceeds of short-time loans are frequently used. The inevitable day of reckoning (the due date of such loans) arrives and extensions are requested. The banker expresses his surprise that the loans cannot be repaid and states that banks are not in business to furnish capital for fixed investments but only to finance seasonal requirements. In many cases this statement should have been made when the loans were negotiated. Bankers do not want their money when the borrower is able to pay. They are very insistent when inability to pay seems imminent. The moral is that the proceeds of short-time loans should never be used to finance fixed assets.

The remedy is for the business to get additional outside funds for expansion of capital assets, either by selling new capital stock or issuing long-term bonds. If the conditions are not favorable for the sale of capital stock or bonds due to the poor credit of the concern or the unsatisfactory condition of the investment market, the concern must meet the situation in some other way. If necessary, an arrangement should be made with creditors by one of the methods suggested and outlined in remedies and reliefs of this section.

There is nothing unreasonable in the demand of creditors that those within an organization should secure funds for capital purposes. Bankers and merchandise creditors have no financial interest in profits and should not be called upon to subject their claims to the risks of a business.

There should be in the minds of the financial executives of a business at all

times the possibility of having to secure additional capital to finance any expansion of capital requirements. Dependence on short-time loans and merchandise creditors with inability to supplement such sources on short notice, has plunged thousands of concerns into bankruptcy.

EXCESSIVE FIXED CHARGES AND DIVIDENDS.—A frequent cause of financial insolvency is the desire to pay dividends before accumulating **sufficient reserves or surplus** to meet conditions which may develop in the usual life of a business.

Another cause of financial difficulties, particularly in new concerns, is excessive fixed charges. This is primarily the result of lack of proper capital apportionment in that an excessive proportion of money was raised by bond issues on new and untried enterprises.

CHANGES IN DEMAND FOR PRODUCTS.—Concerns engaged in a single line of business of a special kind often fail or get into financial difficulties when there is a change in style or demand for their products. An outstanding example is the failure of the American Bicycle Co. in 1902 due to the cessation of the bicycle fad. The recent development of the radio has had an adverse effect on the piano and phonograph trades and some phonograph concerns have suffered financial difficulties, while recent trends in the style of women's clothes have ruined many formerly prosperous corset manufacturers. The passing of the petticoat has seriously affected the cotton goods trade.

THE BUSINESS CYCLE.—Although business men and economists are not entirely in agreement as to the causes of business cycles, there are distinct evidences of increased business failures during the declining and depression periods of a business cycle.

The business and economic history of the United States shows that in a general way prices and demand for goods increase for a number of years until they reach a point, called the peak, followed by a period of reaction, accompanied by declining prices and a more restricted demand for merchandise. This period is in turn followed by a period of depression during which prices remain low and the demand for goods light. During the declining period and the depression period, failures increase for different reasons as shown in the following paragraphs:

LOSSES IN INVENTORIES.—Some concerns fail during the periods of reaction due to losses in their inventories which were accumulated at high prices, and, unless they have retained **sufficient reserves** from previous earnings, they are unable to withstand such losses. In the sudden decline of prices in 1920, many firms were caught with large inventories at high prices and the result was failure in a large number of instances.

During the period of depression that follows the period of reaction, business may be so poor and prices so low that current operating expenses cannot be met and recourse must be taken to accumulated reserves. Concerns which have not made provision for such depressions, may have their **capital impaired** to such an extent that they will be forced to discontinue business.

OTHER SPECIFIC CAUSES.—**Disasters** not provided for by insurance, or otherwise, such as fires, floods or tornadoes, may destroy assets to the extent that concerns become immediately insolvent. **Wars, tariffs, inventions, discoveries,** and the like may at once bring about a condition of insolvency in many businesses directly or indirectly affected thereby.

ECONOMIC AND FINANCIAL INSOLVENCY.—**Economic insolvency** is sometimes said to be the condition of a business when the value of all of its

assets is less than the total amount of its creditor liabilities. This condition exists when the capital is completely wiped out. Any business that continues year after year to lose money will sooner or later reach this condition unless additional capital is put into it, adjustment made with creditors, fixed charges reduced, or financial and operating policies changed so as to stop losses and recoup previous losses by later profits.

Financial insolvency is a phrase used to designate the condition of a business that possesses more assets than liabilities, but is unable to meet its obligations. This type of insolvency is more prevalent than economic insolvency and often exists in concerns that are earning large profits. This condition is not due to an inherent weakness in the business and does not always result in a loss of asset values but is merely the result of poor financial management in that there is an improper distribution of values between capital and current assets. The condition results primarily from expansion and accumulating **"frozen assets."**

INSOLVENCY AND FAILURE DISTINGUISHED.—The commonly heard expressions "a failure," "to fail," "failed," and the like, invariably relate to the final winding up of a business that cannot continue because of insolvency. Although practically every failure is due to an insolvent condition, every insolvent business does not necessarily fail. An insolvent condition may be temporary and when taken at the proper stage may often be overcome. With this exception, failure and insolvency are synonymous terms.

ILLUSTRATIONS OF INSOLVENCY.—The following hypothetical balance sheets will serve to illustrate some causes and effects of insolvency. The cases have been exaggerated in order to make the circumstances clearer. The illustrations are followed in each instance by brief comments intended to call attention to the particular point brought out.

First Illustration: Balance Sheet, December 31, 19—

Cash		$ 6,000	Notes Payable, due Jan. 2		$100,000
Accounts Receivable		7,000	Accounts Payable, due Jan. 2		40,000
Inventories		10,000			140,000
Investments		1,000	Capital Stock	$25,000	
Plant		50,000	Deficit resulting from operating losses	91,000	*66,000*
		$74,000			$ 74,000

This company cannot meet its maturing debts from its cash funds, or by liquidation or by hypothecation of its other assets and is in a state of economic insolvency. The excessive losses indicated would seem sufficient ground for winding up this business on any terms. Yet, if the losses were not so pronounced, and there was reason to hope that the business could be made very profitable, solvency could be restored by extending the maturity date of the major indebtednesses by issuing bonds or debentures for them, or by the sale of additional stock, or by the exchange of capital stock for the major indebtedness.

Second Illustration: Balance Sheet, December 31, 19—

Cash		$ 5,000	Notes and Accounts Payable, due Jan. 30		$285,000
Accounts Receivable		6,000	Acceptances Payable		125,000
Raw Materials, requiring 6 months to process, and not otherwise salable		225,000			410,000
Goods in Process		50,000	Capital Stock	$25,000	
Plant		150,000	Surplus	1,000	26,000
		$436,000			$436,000

The notes and accounts payable in this illustration must be met before the inventory can be processed and turned over. Such a concern is financially insolvent, because more than its capital and surplus is tied up in plant and frozen inventories. It needs more capital for the volume of business it has undertaken to carry on.

Third Illustration:

Balance Sheet, December 31, 19—

Cash	$ 6,000	Notes and Accounts Payable		$385,000
Accounts Receivable, of which only 25% are collectible	230,000	Capital Stock	$25,000	
Other Assets	200,000	Surplus	26,000	51,000
	$436,000			$436,000

In this instance the business has been **too liberal in extending credit.** If all the accounts receivable were collectible, but did not become due before the liabilities, the business would be financially insolvent.

INSOLVENCY OFTEN COMES QUICKLY.—Values may decline rapidly and creditors may become uneasy and refuse extensions. These two factors were much in evidence in 1920 and 1921, and as a result many formerly prosperous concerns found themselves insolvent. Realization of their condition and a general faith on the part of the creditors in the ability of the concerns later to work out of their difficulties gave rise to **creditors' committee arrangements** popular since 1921. These arrangements are, in the last analysis, agreements on the part of creditors to extend the maturity of their claims, the business being conducted in the interim under actual or partial control and supervision of a representative of the creditors.

Remedies and Reliefs

SUMMARY OF REMEDIES AVAILABLE.—Financial executives in considering plans for the relief of concerns in financial difficulties will be governed largely by the specific conditions they have to meet. The remedies which are available may be broadly classified as follows, stated in the order of their customary consideration and their desirability:

Extensions and refinancing	Receiverships in equity
Compositions and assignments	Bankruptcies
Creditors' committees	Reorganizations

Reorganizations, although closely related to refinancing and available at any stage of the proceedings prior to final discharge in bankruptcy, have been placed last in the list merely because they logically follow the termination of activities by original proprietors, and the commencement anew by the purchasers of the principal assets of the old concern.

ANALYZING THE CONDITION.—The first consideration in cases of insolvency should be to determine the exact status of the concern and if possible the causes which brought about the condition. To do this **balance sheets** should be prepared and **comparative operating statements** obtained as quickly as possible. These should then be studied for the causes of trouble and for any information they might reveal indicating whether there is reasonable hope that solvency might be restored, and how such a condition may be brought about.

FIRST STEP—LIQUIDATING AVAILABLE ASSETS.—An effort should first be made to liquidate overbalanced inventories, collect outstanding

accounts, recall distant or scattered investments, and to convert into cash, as soon as possible, any non-liquid assets upon which the continuation of business is not dependent.

OBTAINING NEW CAPITAL.—An effort should be made to obtain new capital advances from stockholders. This may take the form of **donations of stock** for resale, **cash donations** for the purpose of creating a paid-in surplus, the sale of additional stock or an issue of bonds, debentures or long-time notes to be absorbed by the stockholders or those friendly to the concern.

EXTENSIONS.—Next, an attempt should be made to obtain **extensions of the maturity dates** of the principal creditors' claims. Small creditors are usually more unreasonable and troublesome than large ones and should, if possible, be paid in full, thereby confining the creditors to as few in number as practicable.

Creditors who may not voluntarily agree to extensions of the maturity dates of their obligations may often be persuaded to agree to such extensions under creditors' committee management. This procedure is less injurious to both debtors and creditors than perhaps any other form of legal control.

Agreements by creditors to give debtors extensions of time are not binding on creditors unless supported in each instance by a consideration. Where, however, there are several creditors, who agree among themselves to give debtors extensions, the creditors can be held to their contract. In such cases the forbearance of one creditor constitutes the consideration for the forbearance of others.

Under certain circumstances it would be unwise for creditors to grant extensions. Where the investigation discloses **fraud** it would be futile to aid defrauding debtors; and where the debtors' affairs are hopelessly involved and beyond the possibility of salvation, extensions can do no good.

There are certain circumstances which would justify creditors in considering extensions in order to obtain settlement of their claims and also save the debtors. These conditions are:

1. **Honest debtors.** Where such is the case creditors are likely to have the best co-operation of the debtors so that their claims may be paid. Where debtors are not honest they deserve no further consideration from creditors.

2. **Ability of debtors.** If they have capacity and qualifications to run the business successfully with assistance from the creditors, extensions may be granted.

3. **Degree of financial embarrassment.** Where concerns have earning possibilities and are only embarrassed to the extent of their inability to convert their assets into cash, extensions should be granted as far as necessary to accomplish such conversion.

4. **Temporary conditions.** Where concerns have suffered by reason of temporary conditions which can be overcome or rectified, it is to the best interest of the creditors to grant extensions.

READJUSTMENT OF CLAIMS.—Creditors may agree to readjustment or settlement of their claims, both by extensions and by taking part in the new capital financing. This can be done only when all the creditors are reasonable and when they have faith in and are friendly to the management of the embarrassed concern. In such cases they may prefer, for their own interest, to keep the situation out of the courts and avoid the heavy expenses incident to a receivership.

This remedy is usual among the creditors of small corporations. It requires a degree of **harmonious action** that is difficult to bring about among a great

number of people. The attempt, however, was made in July, 1915, in the case of the Missouri Pacific–Iron Mountain system. The details of the plan of readjustment need not, for this purpose, be considered. The point is that in spite of the obvious merits of the plan, its remarkably strong backing and the general indorsement of the financial press and of financial authorities, the final results were disappointing. It proved to be impossible to secure the voluntary assent of all, or practically all the security holders, and it was found necessary to go through the cumbersome and expensive process of reorganization.

A similar attempt was made in 1913 in the case of the Hudson and Manhattan Co. which operates the underground railway system through the Hudson River tunnel. In this instance the number of holders of obligations was much smaller and the **plan of readjustment** was successfully carried through. This plan, wherever practicable, is by far the most economical and most satisfactory method of meeting a condition of insolvency. Its success, however, is always dependent upon the presence of a fair degree of mutual confidence and good faith among the various parties concerned.

Compositions

DEFINITION.—"Composition with creditors is an arrangement between a debtor and his creditors, the latter agreeing with the debtor, and mutually among themselves, to receive and the debtor to pay, a certain part or portion of the demands in full payment and discharge of the debt." (*Anderman* v. *Meier*, 91 Minn. 413.)

"A composition agreement is an agreement as well between the creditors themselves as between the creditors and their debtor. Each creditor agrees to receive the sum fixed by the agreement in full of his debt." (*Reynolds* v. *Pennsylvania Oil Co.*, 150 Cal. 629.)

"In all compositions the creditors are moved by some advantage to be obtained in a distribution of property or money by the debtor, or by fixed payments to be made by him securing to each a certain proportion of his assets." (*Henry* v. *Patterson*, 57 Pa. 346.)

The form of composition agreements is immaterial provided they contain the elements essential to sustain validity. These elements are (1) concession to an embarrassed or insolvent debtor; (2) mutuality of contract between the creditors. (*Crawford* v. *Krueger*, 201 Pa. 348.)

TYPICAL FORM OF AGREEMENT.[1]—

COMPOSITION WITH CREDITORS

TO ALL TO WHOM THESE PRESENTS SHALL COME, We, Who Have Hereunto Subscribed Our Names and Affixed Our Seals, Creditors of Y. Z., of ....., ..., Send Greeting:

Whereas,* the said Y. Z. does justly owe and is indebted unto us, his said several creditors, in divers sums of money, but by reason of losses, disappointments, and other damages happened unto the said Y. Z., he is become unable to pay and satisfy us of our full debts, and just claims and demands, and, therefore, we, the said creditors, have resolved and agreed to undergo a certain loss, and to accept of ..... cents for every dollar owing by the said Y. Z. to us, the several and respective creditors aforesaid, to be paid in full satisfaction and discharge of several and respective debts:

Now, Know Ye, that we, the said creditors of the said Y. Z., do, for ourselves, severally and respectively, and for our several and respective executors and administrators, partners and assigns, covenant, promise, compound, and agree, to and with the said Y. Z., his (heirs),

[1] Birdseye's Abbot's Clerks and Conveyancers Assistant.

executors and administrators, by these presents, that we, the said several and respective creditors, executors, administrators, partners, and assigns, shall and will accept, receive and take of and from the Y. Z., his (heirs), executors and administrators, for each and every dollar that the said Y. Z. does owe and is indebted to us, the said several and respective creditors, the sum of ..... cents for and upon every dollar, in full discharge and satisfaction of the several debts and sums of money that the said Y. Z. owes and is indebted unto us; to be paid unto us, the said several and respective creditors, our several and respective executors, administrators, partners, and assigns, within ..... months next after date of these presents. And we, the said several and respective creditors, do severally and respectively, for ourselves, our several and respective executors, administrators, partners, and assigns, and not jointly for each other, or the representatives, etc., of each other, covenant, promise, and agree, to and with the said Y. Z., his executors and administrators, that the said Y. Z., his executors, administrators, and assigns shall and may, from time to time, and at all times within the said term of ..... months next ensuing the date hereof, assign, sell, or otherwise dispose of his property, at his and their own free will and pleasure, for and towards the payment and satisfaction of the said ..... cents for every dollar the said Y. Z. owes and is indebted, as aforesaid, unto us, the said respective creditors; and that neither we, the said several and respective creditors, nor any of us, nor the executors, administrators, partners or assigns of us, or any of us, shall, or will, at any time or times hereafter, sue, arrest, attach, or prosecute the said Y. Z. or his property and chattels, for any debt or other thing now due and owing to us, or any of us, his respective creditors aforesaid; so as the said Y. Z., his executors or administrators, do well and truly pay, or cause to be paid, unto us, his said several and respective creditors, the said sum of ..... cents for every dollar he owes and is indebted unto us respectively, within the said space of ..... months next ensuing the date hereof† (or, if several payments are to be made, state them here).

In Witness Whereof, we have hereunto set out hands and seals the day and year first above written.

.....

In the presence of

.....

TYPICAL FORM OF LETTER OF LICENSE OR COMPOSITION DEED[2]

To be Void, Unless All the Specified Creditors Sign

TO ALL TO WHOM THESE PRESENTS SHALL COME, We, A. B., and C. D., and (etc., naming all the creditors who are to sign), Who Have Hereunto Subscribed Our Names, and Affixed Our Seals, Creditors of Y. Z., Send Greeting:

Whereas [continuing as in foregoing Form, from the star (*) near the beginning, to the dagger (†), near the end, and conclude thus]: Provided always, nevertheless, and it is the true intent and meaning of these presents, and of the said parties hereunto that if all the said parties above named as creditors (or, if two-thirds in amount of the said parties above named as creditors, or otherwise, as may be agreed) shall not subscribe and seal these presents, then, and in such case, the liberty and license hereby given and granted, and every clause, covenant, matter and thing herein contained, shall cease and be utterly void, to all intents and purposes; anything hereinbefore contained, to the contrary thereof, in anywise notwithstanding.

In Witness Whereof, the said parties to these presents have hereunto set their hands and seals the ..... day of ....., 19...

In the presence of A. B. (seal)

..... C. D. (seal)

(Signature of witness) E. F. (seal)

PARTIES.—One creditor alone cannot make a composition. (*Latapee* v. *Pecholier*, 14 Fed. Case No. 8101.) Two or more creditors agreeing to a com-

[2] Birdseye's Abbot's Clerks and Conveyancers Assistant.

osition, it will be valid and binding on them and on the debtor where there s no requirement that the agreement to become effective must be entered into y a greater number of creditors. (*Van Bokkelen* v. *Taylor*, 62 N. Y. 105.)

Where the composition agreement provides that it shall not become effective until a certain number of creditors, all or a majority shall have agreed to it, the composition does not become operative until the required number agree. (*Day* v. *Jones*, 150 Mass. 231.)

The debtor may enter into a composition with only one class of creditors such as the unsecured creditors. (*Zoebisch* v. *Van Minden*, 120 N. Y. 406.)

"An agreement for composition may be entered into by a part of the creditors of an insolvent debtor, and in such a case it will be binding upon those only who enter into it. In such a case, the creditors who do not enter into the agreement may proceed to collect or to settle their claims in their own way. If such a creditor makes a better settlement than those who agree to the composition, or obtains any other advantage, he will be permitted to retain it." (*Atlas Engine Works* v. *Seymour First Nat. Bank*, 50 Ind. A. 549.)

REASONS FOR UPHOLDING COMPOSITION AGREEMENTS.—"Arrangements of this nature are of frequent occurrence and of the greatest practical importance, especially in commercial circles. The peace and tranquillity of the whole commercial world, or of great numbers in it, as well as that trust and confidence which are the life of trade and commerce, are to a great extent dependent upon the validity and finality of such settlements. It would not be easy to estimate, but the numbers are not small, in all our large towns and cities, of persons engaged in commercial pursuits who stand upon such settlements as the foundation of their credit and solvency; and, such foundation being taken away, pecuniary ruin must not only come to themselves, but loss and disaster must likewise fall upon many others, who acting on the faith of the settlements, have entered into commercial dealings with, and given extensive credits to, the debtors making them. And this condition of things, owing to the misfortune of some, the incapacity of others, and the dishonesty or extravagance of still others as also to the contractions and expansions of the circulating medium and fluctuations of the money market, which are always occurring at periods more or less frequent, always has existed, and probably always will exist, in all commercial communities. The indifference of the law to such settlements, or the easy and successful disregard of them by the assenting creditors, or any of them, must therefore always be attended with widespread disturbance and mischief, and be the constant source of distrust and alarm. Hence it is that the law is not indifferent to them, but guards and upholds them with a solicitude and watchfulness proportionate to the evils which must follow if it were otherwise, or if they were easily to be set aside, or broken up and abandoned for slight and trivial causes. For it is of the constitution of these agreements that they cannot be impeached or disregarded by one creditor without at the same time opening the door to all others, and annuling the settlement to all intents and for all purposes. Such are the constituent elements and essential qualities of them, that they must bind and conclude all the creditors joining in their execution or they will bind and conclude none. If one creditor is permitted to go behind and disregard the agreement every other must have the same privilege; and thus the whole settlement falls to the ground and loses all force by the successful attack or impeachment of one." (*Johnson* v. *Parker*, 34 Wis. 596.)

CAUTION IN CONSIDERING THE ACCEPTANCE OF COMPOSITIONS.—Composition settlements are usually proposed by debtors who submit terms

of compromise to creditors, either individually or at a meeting called for that purpose. A meeting of creditors is better than making the proposal to separate creditors for the reason that creditors are then in a position to discuss the debtors' status and to decide promptly. Where creditors are numerous and scattered, there is likely to be delay and there may be some who are not familiar with the condition of debtors or may not be favorably disposed to the debtors' proposal.

Offers in composition should never be considered by creditors when there is well-founded suspicion of fraud on the part of debtors. Creditors are entitled to know all the facts and figures of the debtor's business and where the funds are coming from to pay the creditors agreeing to the compositions. Prudence dictates that the creditors should insist on having the money, or satisfactory security for it, actually put up before consenting and signing composition agreements.

WHEN TO AGREE TO COMPOSITIONS.—Composition settlements under certain circumstances are the most effective and most economical means of dealing with embarrassed debtors. When debtors are honest, this form of settlement is due them by creditors. In the final analysis the losses to creditors in making such settlements are some of the hazards of business which they must expect. Creditors must join at times with debtors in carrying the losses incidental to business. Such arrangements have often enabled debtors to regain their position in commercial activity with subsequent increase of business and profits to themselves and their creditors with whom they continue to transact business.

The creditors are naturally interested in obtaining as large settlements as possible of their claims. Compositions are at times preferable for two reasons: (1) the amounts of settlement are definite; (2) the amounts realized are likely to be greater than can be expected from forced liquidations accompanied by heavy court and legal expenses.

To take **a concrete example,** the balance sheet of a business shows that the total assets amount to 75% of the liabilities. As a going concern, the assets may be worth that much, but if forced liquidation is resorted to the assets may, and very likely will, realize a great deal less than the book value. With this situation it is apparent that the business is insolvent. If the business is forced into bankruptcy, with the expenses and losses incident to such a procedure, the creditors could consider themselves fortunate if they receive liquidating dividends aggregating 25% of their claims. A composition settlement of 50% of the claims would be better for all concerned. The creditors would receive 50% of their claims instead of 25% and the debtor would have 25% to continue and rehabilitate the business and would still have his business which under bankruptcy would probably have been taken from him.

FORCING COMPOSITION SETTLEMENTS ON OBSTINATE CREDITORS.—Where a number of creditors, say 75%, agree to accept a composition settlement proposed by a debtor and the remaining 25% refuse to agree to such terms, it is possible to **force the proposed settlement** on the minority by the following procedure: Three or more of the creditors file a petition in bankruptcy, but before adjudication the debtor asks for a creditors' meeting for the purpose of considering an adjustment, which if granted, stays the bankruptcy proceedings. At the creditors' meeting the debtor is examined and then a composition settlement is proposed by the debtor. The assenting creditors, representing a majority, both in number and amount, agree to accept this settlement and petition the court to have it confirmed. On confirmation

he composition settlement becomes binding on all the creditors. In this way he debtor can obtain relief without incurring the disgrace and loss incident to n adjudication in bankruptcy.

Assignments

DEFINITION.—What are generally referred to as assignments for the benefit of creditors, or general assignments, or more correctly, assignments in trust for the benefit of creditors, are usually the **transfer of all assets or property** of insolvent debtors, to trustees, to sell such property and distribute the proceeds among the creditors of the insolvent debtors.

"An assignment is substantially a transfer, actual or constructive, with the clear intent at the time to part with all interest in the thing transferred and with a full knowledge of the rights so transferred." (*Ormond* v. *Connecticut Mut. L. Ins. Co.*, 145 N. C. 140.)

ADVANTAGES OF ASSIGNMENTS.—Assignments for the benefit of creditors are a means embarrassed debtors may have to adjust their affairs. Such methods combine the advantages of amicable adjustments with some of the aspects of bankruptcy. The advantages of such methods over bankruptcy are:

1. The **expenses of administration** are less than in bankruptcy proceedings.
2. Under assignments a **time limit** is **not set** for settling the affairs of debtors, and trustees may hold the assets together until they can be sold under favorable conditions, whereas in bankruptcy they are frequently sold at forced sale.
3. There is **less publicity** attached to assignments than to bankruptcy proceedings.
4. The administrations of debtors' estates under assignments are **private matters** between trustees and creditors, whereas in bankruptcy they are open to the public and are matters of public record.

STATE INSOLVENCY LAWS.—All states have insolvency laws whereby debtors may assign their property to trustees for the purpose of liquidation and distribution of proceeds among creditors.

In most states the laws provide that assignments shall be recorded in the offices of the county clerks where debtors reside or have their principal places of business, and that sworn statements be filed by them showing their inventories of property and their creditors.

The state courts have **jurisdiction** in assignments under the state insolvency laws. Assignees are answerable to and are under the supervision of the insolvency judges, who may also:

1. Approve composition settlements.
2. Authorize the filing of suit for the recovery of property transferred to defraud creditors.
3. Restrain debtors or witnesses from leaving the jurisdiction.
4. Authorize payment of dividends.
5. Exercise practically all the powers vested in a court of equity.

ASSIGNMENTS ARE ACTS OF BANKRUPTCY.—Under the Federal Bankruptcy Laws assignments for the benefit of creditors are **acts of bankruptcy** and as the federal laws supersede and are paramount to state laws, dissatisfied creditors may have assignments set aside by filing petitions in bankruptcy. The result is to take the administration of the property out of the jurisdiction

of the state insolvency courts and place it in the hands of a receiver or trustee in bankruptcy under the Federal Bankruptcy Laws.

Although creditors have this privilege it is not always best to exercise it, particularly not if they are satisfied as to the good faith of the debtor and honesty and ability of the assignee.

In some jurisdictions however, notably New York, there is little possibility of state receivers remaining undisturbed. Certain lawyers who specialize in federal bankruptcy practice, aided by unrepresentative creditors, rush into the federal courts, invoke their powers, and thus secure the emoluments which the cases afford, and in many cases the creditors who are not directly represented suffer from carelessness or mal-administration.

RIGHTS OF CREDITORS.—Creditors have the right to object to assignments and may file petitions in bankruptcy. Where creditors have consented to assignments they are estopped from filing petitions in bankruptcy. For this reason creditors should not consent to assignments until they know all the facts and have absolute faith in the assignees. The creditors have a right to an accounting from assignees, and if this is not furnished pressure can be brought by proper application to the courts.

THE ASSIGNEES.—Assignees may be **named by debtors** when making assignments; where none are designated, the court will select them. Debtors have the right to select their own assignees, and are under no obligation to consult the wishes of creditors provided the persons selected are capable of performing the duties of the office. Although selected by debtors, the assignees are supposed to **act in the interest of the creditors.** Assignees may or may not be creditors of the assignors.

FORM OF ASSIGNMENTS.—In most states the statutes require that every assignment for the benefit of creditors must be in writing and sometimes other formalities are required. The writing usually is in form similar to that set forth in the next paragraph. Such instruments should be drawn with the same care as any other deed of conveyance.

The instrument consists of two principal parts:

A. The **transfer to the assignee** which vests in him the title to the property
B. The **declaration of trust**, which directs him how to dispose of it.

The instrument is made up of the following components:

1. The commencement
2. The recital
3. The consideration
4. The transfer
5. The description of property
6. The declaration of trust and direction to the assignee
7. Power of attorney to the assignee
8. Covenant by the assignee
9. The concluding clause

FORM OF ASSIGNMENT[3]

(Without Preferences)

Know all men by these presents, that whereas, I, A. B., of ....., am indebted to divers persons in considerable sums of money, which I am at present unable to pay in full, and am desirous to convey all my property for the benefit of all my creditors without any preference or priority.

Now, Therefore, I, the said A. B., in consideration of the premises, and of one dollar to me paid by Y. Z., of ....., the receipt whereof is hereby acknowledged, have granted, bargained, sold, assigned, transferred, and set over, and by these presents do grant, bargain, sell, assign, transfer, and set over, unto the said Y. Z., all my lands, tenements, hereditaments, goods, chattels, property, and rights in action of every name,

[3] Birdseye's Abbot's Clerks and Conveyancers Assistant.

nature, and description, wheresoever the same may be, except such property as is by law exempt from execution.

To have and to hold the same unto the said Y. Z. in trust, to sell and dispose of the said real and personal property, and to collect the said rights in action, with the power to compound for the said rights in action, taking a part for the whole, where the said Y. Z. shall deem it expedient so to do; and then in trust to apply the proceeds of the said property and rights in action in the following manner:

1. To pay the costs and charges of these presents, and the lawful expenses of executing the trust hereby created, and the wages or salaries actually owing to the employees of the said A. B.

2. To distribute and pay the remainder of said proceeds to the creditors of me, the said A. B., for all debts and liabilities which I may be owing or indebted to any person whatever; provided, however, that if there shall not be sufficient funds with which to pay all my said debts, then the said debts are to be paid ratably and in proportion.

3. The residue and remainder of said proceeds if any there be, after paying all my said debts in full, the said, Y. Z. is to repay to me, or to my executors, administrators, or assigns.

In Witness Whereof, I have hereunto set my hand and seal, this day of

In presence of ..... A. B. (Seal)

.....

SUPPLEMENTAL SCHEDULES.—Assignments are usually accompanied, as required under the laws of some states, by three schedules which are generally referred to in the assignments and which become parts of them. They are:

1. An inventory of assigned property
2. A schedule of creditors
3. A schedule of debts due the estate

FORM OF INVENTORY SCHEDULES.[4]—The following is a full and true inventory of all the estate, both real and personal, of the copartnership firm of A. B. & Co., in law and equity, and the incumbrances existing thereon, and all the vouchers and securities relating thereto, and the value of such estate, according to the best knowledge and belief of the individuals composing said copartnership:

Statement of Property of Estate

Description of Property and Where Situated	Incumbrances	Estimated Market Value Above All Incumbrances	Vouchers and Securities

FORM OF SCHEDULE OF CREDITORS.—The following is a schedule of the names of the creditors, the general nature of such indebtedness and the amounts thereof:

Schedule of Creditors of Estate

Name of Creditor	Residence	Amount Due to Creditor, and Nature Thereof	Consideration of Indebtedness, and When Contracted	Judgment, Mortgage, Collateral, or Other Security for Indebtedness

[4] Birdseye's Abbot's Clerks and Conveyancers Assistant, p. 168.

FORM OF SCHEDULE OF DEBTS DUE THE ESTATE.—The following is a statement of the debts due the assignor, the general nature of said indebtedness and the amounts thereof:

Schedule of Debts Due to Estate

Name of Debtor	Amount of Claim	Good	Doubtful	Bad	Remarks

FORM OF AFFIDAVIT TO INVENTORY AND SCHEDULES[5]

STATE OF NEW YORK)
COUNTY OF NEW YORK) ss.:

A. B., of ....., and C. D., of ....., copartners, members of the copartnership firm of A. B. & Co., formerly doing business in the city of ....., being severally sworn, say, and each of them for himself says, that he has read the foregoing inventory and schedules, and that the same are in all respects just and true according to the best of his knowledge and belief.

.....
.....

Sworn to before me, this .....
day of ....., ...
.....

SPECIAL PROVISIONS—RELEASE OF DEBTOR.—Assignments are sometimes made on condition that the creditors shall accept the provisions made for them in full satisfaction and discharge of their claims. The validity of such stipulations has been sustained in some states, in others they have been held void.

LIMITATION OF TIME.—Sometimes assignments contain a clause limiting the time in which creditors may accept the terms. The various states are **not in accord** in the interpretation of such provisions. Where allowed, the time must be reasonable in view of the facts of the case, and cannot be too long, or too short, so as to operate against the interest of the creditors.

If the time is too long, it delays the creditors in the collection of their claims and may reduce the possibility of obtaining full value for the property of debtors. If the time is so short as not to afford sufficient time for proper investigation, it may raise a presumption of fraud.

EXECUTION OF ASSIGNMENTS.—Assignments, as well as the schedules, should be dated and executed. In most cases the instruments are under seal, and if real property is conveyed, this formality should not be omitted. The instruments must be executed by the assignors or by their attorneys in fact acting under valid powers of attorney for that purpose.

Assignees in some states are required to **formally accept** the trust by signing the instruments. Ordinarily this is required where the instruments contain covenants to be performed by the assignees.

Generally, assignments are good even if the assignees do not sign and execute the instruments. Acceptance and entering upon the performance of the trust bind the assignees as if they had entered into formal execution of the instruments.

[5] Birdseye's Abbott's Clerks and Conveyancers Assistant.

ATTESTATION.—In some states assignments must be sworn to by the assignors. In practically all states such instruments should be executed before witnesses.

RECORDING ASSIGNMENTS.—In some states assignments are not valid until they are recorded in a public office, generally the county clerk's office, within a certain time after execution. If **real estate** is assigned and the property located in some other place, a certified copy of the assignment must be filed in the county where the real estate is located.

DELIVERY OF ASSIGNMENTS.—To complete the transfer of property under assignments it is necessary to deliver the instruments to the assignees. The record of the deed in the county clerk's office is prima facie evidence of delivery.

DELIVERY OF PROPERTY.—Property transferred under assignments should be reduced to possession by the assignees as soon as practicable. The real estate passes by mere delivery of the deed. Personal property should be taken possession of by the assignees. Constructive delivery is permitted where physical delivery is impracticable. The federal courts have laid down a rule that unless the assigned property follows the deed and is transferred to the assignee, the assignment is deemed fraudulent and void against creditors.

DUTIES OF ASSIGNEES.—When assignees receive assignments from debtors, they are formally and officially recognized as assignees. Their duties are:

1. To give public notice of assignment and their appointment as assignees.
2. To execute bonds for the faithful performance of trust.
3. To take possession of the property listed in the schedules accompanying the assignments.
4. To collect the debts due the assignors.
5. To sell the property transferred under the assignments.
6. Out of the proceeds of sale and debts collected, to pay the expenses of realization and distribute to creditors dividends on their claims. Dividends are usually paid from time to time as funds accumulate in the hands of assignees.
7. To turn over to the assignors funds left in the hands of assignees after paying the claims of the creditors in full.
8. To file an accounting which generally closes the estate.

Assignees hold a **fiduciary relation** to their assignors and to the creditors. Good faith is essential. They may be held liable personally for misconduct or breach of trust. They are expected to make an accounting of their transactions and may be removed from office for violation of trust. They are liable for property or money lost by negligence.

NOTICE TO CREDITORS.—One of the first duties of assignees is to give **notice to creditors of the assignment.** This is usually done by publication in one or more newspapers. In most states public notice is required by statute.

The notice is generally in the form of an advertisement setting forth that the debtor has made an assignment for the benefit of his creditors and that so and so was appointed assignee, and requests creditors to present their claims to him, and the debtors to pay their accounts to him. The following form may be used:

FORM OF NOTICE TO CREDITORS[6]

In pursuance of an order of Hon. ....., of .... county, notice is hereby given to all persons having claims against .....

[6] Birdseye's Abbott's Clerks and Conveyancers Assistant.

..... (assignors), lately doing business in the city of .....
....., under the firm name of ....., to present the same, with the vouchers thereof duly verified, to the subscriber, who has been duly appointed assignee of said ....., for the benefit of creditors, at his office, No. ..... street, in the city of ....., on or before the ..... day of .....

Dated ....., day of .....

....., Assignee

SALE OF PROPERTY ASSIGNED.—The most important duty of assignees is to sell the property assigned in order to obtain cash to **settle claims of creditors.** Assignees cannot appropriate property to their own use even though they charge themselves with the cost price. They are expected to exercise diligence and good faith in the sale of property, and if they manage sales with gross carelessness so that the interest of one party is advanced at the expense of another, they are personally liable to the injured parties for their losses.

MANNER AND TERMS OF SALE.—Assignees are not required, generally, to sell property within a prescribed time, but should use their discretion to obtain the best prices. They should, however, sell within a reasonable time. If they delay unreasonably, this may be construed and is sometimes considered as evidence of fraud.

Property may be sold at private or public sale, whichever is to the best interest of the creditors. Where property cannot be sold at a fair price at private sale it should be sold at public auction after giving the creditors reasonable notice as to the time, place and purpose of the sale.

The **terms of sale** in some states may be for cash or credit, in other states assignees are forbidden to sell on credit.

COMPENSATION OF ASSIGNEES.—Assignees are entitled to compensation for their services. This is sometimes set forth in the assignment, which may fix a definite amount or stipulate in general terms. Where such is not the case, they are entitled to reasonable compensation, which in most states is held to mean the equivalent of that received by executors and trustees of estates. Assignees' fees are prescribed by statute in some states. The compensation is ascertained and awarded by the court when assignees present their accounting.

Where assignees render **legal services** for estates, they cannot charge for such services beyond the amount allowed and included as part of their compensation as fixed by law.

When assignees are guilty of misconduct, carelessness or breach of trust, no compensation will be allowed them. Likewise, if they mismanage the estate or refuse to render an account.

ASSIGNEES' ACCOUNTING.—In most states assignees must present to the proper court accountings of their administration of estates before they can be discharged. To do this, they should keep **full and detailed records of all receipts and disbursements** made by them, and preferably keep a separate bank account in their names as assignees. Where they fail to keep such records and mingle the estate property with their own, they will be charged with the value of the property turned over and sold by them. Assignees should be prepared to show their accounts to creditors and assignors at any time.

CREDITORS COMING IN UNDER ASSIGNMENTS.—Creditors receiving notice of an assignment have a choice of one of **three alternatives:**

1. Accept the provisions made by the assignment.
2. Disregard the assignment and proceed as if none had been made.
3. Reject the assignment as illegal or fraudulent.

Creditors accepting the provisions made by an assignment may signify their intention by:

1. Becoming parties to the instruments.
2. Formally accepting by giving notice to assignees.
3. Presenting their claims to the assignees for payment.

FORM OF PROOF OF DEBT.[7]—The following is a form of proof of debt:

PROOF OF DEBT

STATE OF .....}
COUNTY OF .....} ss:

....., being duly sworn, doth depose and say: That he is .....; that the annexed statement of the account of ....., lately doing business at ..... in the state of ....., is just, true and correct; that there is now due ....., the sum of ..... dollars; that no part thereof has been paid or satisfied, and that there are no set-offs or counterclaims thereto to the knowledge or belief of deponent.

.....

Sworn to before me this .....
day of ....., ...

.....

When creditors have cause to believe that assignments are fraudulent, they may file a bill in equity praying to have them declared void and set aside. Usually such a petition also includes a petition for an injunction to prevent further proceedings under such assignments, and for the appointment of receivers for the property.

ASSIGNMENT LAWS OF NEW YORK.—The assignment laws on the statute books of New York are believed to be the latest and most scientific examples of such state laws. These laws provide:

1. The assignment shall be recorded in the county clerk's office where the debtor resides, or has his principal place of business.
2. The debtor within 20 days thereafter shall file with the county clerk his sworn schedules showing all his creditors and an inventory of all his property. If a debtor fails to file such schedules, the assignee must do so and the debtor can be compelled by court order to furnish the assignee with the required information to make out the schedules. Where an assignee neglects to file such schedules within 10 days he may be removed by the court on application of any creditor.
3. The books, records and papers of the debtor are open to inspection by any creditor.
4. The debtor must submit to an examination under oath, if so ordered by the court.
5. Creditors must file claims which must be verified.
6. The assignee may advertise for claims.
7. Reasonable notice, usually 10 days, must be given to all interested parties of:
   (a) Proposed sales of the property.
   (b) Payment of dividends.
   (c) All hearings on controversies.
   (d) All compromises proposed.
   (e) Filing final accounting of the assignee.
   (f) Discharge of the debtor from his debts.

[7] Birdseye's Abbott's Clerks and Conveyancers Assistant.

8. The court may authorize the assignee to:
   (a) Continue the debtor's business for limited periods.
   (b) Bring action to recover property transferred in fraud of any creditor.
   (c) Pay dividends to creditors who failed to file claims in time, unless one year has elapsed.

9. The court has power to:
   (a) Discharge the assignee after a composition.
   (b) Punish for disobedience of its orders.
   (c) Restrain the debtor or witnesses from leaving the jurisdiction of the court and may generally exercise all the powers of a court of equity.
   (d) Order a jury trial of any claim or other disputed matters.

10. Assignees, under the New York laws, may receive a **commission** not to exceed 5% of the amount coming into their hands, unless such commission is less than $200, when the court may allow that sum; and additional compensation if the business is to be continued. The court will also allow the necessary expenses of the estate.

11. The New York laws allow, as **preferred claims,** wages and salaries, for work done within three months of the making of the assignment, up to $300 per employee. Other preferences are allowed only to the extent of one-third of the assigned estate, after deducting such wages and salaries. Where the estate is insufficient to pay all of the preferred claims, the proceeds are to be applied pro rata.

12. The assignor may be discharged from his debts on petition and with the consent of creditors having two-thirds of the claims against the estate.

Creditors' Committee Management

DEVELOPMENT OF THE SYSTEM.—In recent years, particularly since 1921, the creditors' committee system of handling the affairs of businesses in financial difficulties has assumed considerable importance. The extension and rapid development of this method is due largely to the wasteful operations and unsatisfactory results obtained, so far as creditors were concerned, through the more formal and drastic proceedings under equity and bankruptcy receiverships.

The management of embarrassed businesses through creditors' committees seems to have had its inception, in a general way, in the bondholders' protective committees formed during the period of railroad receiverships from 1883 to 1899, when a large number of railroads were placed in the hands of receivers. Through the operation of bondholders' committees a number of these companies were reorganized without foreclosure. In the decade from 1889 to 1899 no less than twenty railroad systems aggregating 4,000 to 5,000 miles of lines and representing over $300,000,000 in securities were reorganized in this manner.

The idea was not applied, except in isolated cases, to trading and industrial concerns until shortly after the World War. At that time embarrassments were so widespread and involved so many commercial and industrial concerns that some means had to be found to alleviate conditions which, under ordinary equity or bankruptcy receiverships, would have led to worse business disasters. Out of this situation the informal system of creditors' committee management evolved.

ECONOMIC CONDITIONS OF 1920 AND 1921 A FACTOR.—The general business and economic conditions in 1920 and 1921, in so far as they related to manufacturing and trading, may be briefly summarized as follows:

1. For several years there was a period of rapidly advancing prices of commodities, coupled in many instances with increasing difficulty in obtaining adequate quantities of merchandise.

2. Many firms accumulated inventories and contracted for future needs in large quantities and at increasing prices.

3. As prices rose, buying resistance developed, which culminated in a general, although unorganized, "buyers' strike." Business suddenly met with a cessation of sales and orders.

4. Prices of goods, raw and finished, suddenly fell. In many lines of business there was a general cancellation of orders and repudiation of purchase contracts.

5. Replacement values of goods on hand and on order under contract, suddenly showed considerable losses. Inventory losses made inroads on accumulated surplus. Balance sheets no longer showed the ratio of current assets to current loans required by the banks.

6. The banks demanded either a reduction of the loans or an increase in current resources.

7. The situation was met in numerous instances by the proprietors obtaining from sources, such as the sale of stocks and bonds, funds to save their businesses. In some instances mortgages were placed on plants, but, in many cases, the situation could not be met in this way.

8. Bankers and other creditors realized that if the embarrassed companies were forced to liquidate their quick assets at forced sale, the proceeds would not, in many cases, pay their loans. On the other hand, if the businesses should be continued, the merchandise could probably be sold at fair values and the loans and indebtedness be met.

That this condition was due in many instances to lack of economic foresight did not relieve the situation. No matter what the causes were, leading business men and bankers realized that it was necessary to work out the best solution to conserve their interests. To resort to court receivership or bankruptcy under the conditions in 1920 and 1921, would have made matters worse. Realizing this, the larger creditors, in many instances the banks, formed committees to administer or liquidate the affairs of such embarrassed debtors.

In certain sections of the country, particularly New York, the creditors' committee method of solving business difficulties received more consideration than elsewhere. The prominence of banks on such committees was due to the fact that large loans were made by them on inventories at inflated values. This condition became so general that the phrases **"in the hands of the banks"** or **"in the hands of the creditors,"** became commonplace.

REQUISITES OF AGREEMENT.—Negotiations leading to the operation of businesses by creditors' committees involve the following:

1. That the existing creditors **subordinate and extend their claims.**
2. That the banks or creditors **advance sufficient new money** to operate the businesses, the new advance to be entitled to a priority in repayment.
3. That the management of the businesses pass into **the hands of committees** chosen by the creditors.
4. That the **businesses be returned to the proprietors when the debts are paid in full.**

The foregoing requisites may be incorporated in a single contract between the business managers or proprietors who are in financial difficulties, the creditors who subordinate their claims and extend aid, and the bankers who advance the new money. The same result may be accomplished by a series of agreements as each situation is met, the one being made conditional upon the others.

TYPICAL AGREEMENT.—In an article on Creditors' Committee Receiverships, by Arthur Stone Dewing, which appeared in the *Harvard Business Review* for October 1922, there appears a typical form of agreement which is reproduced. A simple form of creditors' agreement was used to secure the control and extension of debts in the case of an embarrassed electric light company. The names were changed, otherwise the document is the same as used.

"The Essex Electric Trustees of Ohio represented the holding company for the four electric companies. In order to secure administrative control of the entire organization, a majority of the stockholders of the Essex Electric Trustees created a voting trust, of which three of the creditors—Messrs. Field, Wald and Shedd—were the appointed voting trustees. This document was the ordinary voting trustees' agreement.

"In addition to the five large creditors who signed at the end of the agreement, three other smaller creditors with debts aggregating less than $5,000 signed at a later time. Money was provided by assessment on all the parties signatory to the agreement, which was used to pay off, at approximately 40 cents on the dollar, all the smaller creditors whose claims were less than $1,000, and one claim of $2,500 was compromised in the same manner. In addition to the amount requisite to compromise these smaller claims, money was advanced by assessment to operate the companies. Altogether $47,000 was so raised. In return for the assessment the first mortgage prior lien 7% bonds were given at par. These bonds, obviously, were a first lien on the entire property and came prior to all the claims.

"It should be noted that this particular agreement ran for a longer period than was usually the case with embarrassed manufacturing or mercantile businesses. It being a public utility, it was felt that a longer time would be required to either put the company on its feet or else to sell it."

The creditors' agreement was as follows:

THE UNDERSIGNED CREDITORS of the companies named below in Article 1 hereof (hereinafter referred to as the Companies) in consideration of $1.00 and other valuable considerations to each in hand paid, receipt whereof is hereby acknowledged, do hereby SELL, ASSIGN, TRANSFER, SET-OVER AND CONVEY To Fred Field, Albert Wald, George S. White, Byron D. Black and Warren Shedd and the survivor or survivors of them (hereinafter referred to as the Trustees), all their several claims against the Companies (the amounts and nature of which are or may be set after their respective signatures) in trust, nevertheless, for the purposes and upon the terms as follows:

ARTICLE 1. The names of said Companies are stated below in this Article 1 and they are or may be designated in the column headed "Debtor Companies" at the end of this assignment by the letter preceding such Company in this Article 1.

A—Tremont Electric Light Company
B—Paris Electric Light & Power Company
C—Service Electric Light Company
D—Lafayette Electric Company
E—Essex Electric Trustees of Ohio

ARTICLE 2. This assignment is made for the purpose of allowing time and opportunity to work out a reorganization, rehabilitation or readjustment of the Companies or any of them in such manner as to the Trustees, in the exercise of their best judgment, shall seem best for all parties to the end that the claims hereby assigned may be paid or discharged.

To the end stated in the next preceding paragraph, the Trustees are hereby granted full power to deal with the claims hereby assigned in their absolute discretion and as if they were absolute owners, including, without limiting the generality of the foregoing, the right to take such action as they may see fit for enforcing such claims or to delay taking such action; to compound, compromise, allow time for payment or extend the time for payment of such claims with or without taking bonds, notes or other evidences of indebtedness or

security for the same; to take stock, bonds, notes or other securities of the companies or any of them in exchange for or in place of the claims hereby assigned, or any of them; to permit or cause or suffer the companies or any of them to incur future indebtedness and other liabilities for operating expenses, additional capital requirements, and other purposes, which new liabilities may have priority over the claims hereby assigned; to pay, or permit or cause or suffer to be paid or secured in priority to the claims hereby assigned any other claims now existing against the companies or any of them, and in general to use the broadest discretion in dealing with the claims hereby assigned, to the end that the companies may be reorganized, rehabilitated or readjusted financially. Provided, however, that no claim hereby assigned shall be so dealt with as to give any claim hereby assigned priority over any other claim hereby assigned, but only so that all shall be upon a parity and shall be entitled to share pro rata in the proceeds of any payments made to the trustees on account of any such claims and in any securities received by the trustees.

Article 3. Any payments made to the Trustees or any of them on account of any of the claims hereby assigned shall be a full discharge thereof in accordance with the terms of such payment and the person paying shall not be under any obligations to see to the application of the money so paid.

Article 4. The Trustees may act by a majority with or without any meeting of the trustees and any trustee may resign by delivering his written resignation to the other Trustees or any of them, and the Trustees as at any time constituted may appoint a successor to fill a vacancy caused by resignation, death or other disability.

Article 5. The Trustees may take advice of counsel in acting under this instrument and shall be absolutely protected in acting upon such advice, and the Trustees shall each be liable only for his own wilful malfeasance or default and not for that of any other trustee or for any act or omission in good faith.

Article 6. It is the intent of this instrument that it shall be interpreted liberally to the end that the Trustees may have the fullest and broadest powers, rights and discretion in dealing with the claims hereby assigned for the purpose of reorganizing, rehabilitating or readjusting the companies or any of them to the end that the claims hereby assigned may be paid or discharged.

Article 7. This trust shall terminate on June 5, 1924, and a majority of the Trustees may terminate it at any time prior thereto, and upon its termination the claims hereby assigned shall be reassigned to the assignors if the same are then in their present form; but if any thereof have been paid or exchanged for bonds, notes or other obligations, or otherwise changed in form, then the signers hereof shall be entitled to share in all the property then held hereunder pro rata and the trustees may allot the same in their discretion and may determine in their absolute discretion the value of the same for the purposes of such allotment and may sell all or any part for the purpose of allotting the proceeds in money and every such allotment may be made upon terms of such sum or sums as the Trustees shall think proper being paid or allowed for equality.

In Witness Whereof, the undersigned have hereunto set their hands and seals this 5th day of June, 1919.

NAME OF CREDITOR

Ohio Power Company
By Charles S. Warren, Pres.
Washington Trust Company
By Richard W. Patterson, Treas.
Brown-Varney Company
By William M. Lawrence, Treas.
Mansfield Trust Company
By Harold H. Roberts, Treas.
Clinton Engineering Company
By John T. Weston, Pres.

Letter Designating Debtor Company	Amount of Debt	Nature of Debt
....	$52,000	Power contract
....	26,000	Loans (Demand)
....	35,000	Merchandise
....	45,000	Loans—time and demand
....	17,000	Construction contract

CREDITORS' COMMITTEES.—Creditors in appointing committees generally give the **larger creditors** representation and also attempt to select the men best qualified to manage the debtors' affairs. The number of men serving on committees is governed by several factors, such as the magnitude of the concerns, the number of creditors, the different interests, etc., and may be any number the creditors decide upon. For efficiency committees should be as small as conditions permit. Committees of three can handle business problems more easily than larger ones. Sometimes it is, however, necessary to have large committees in order to obtain the support and co-operation of certain large creditors. Where this is necessary it is desirable to appoint small but active **executive committees** with considerable authority. In practice, the banks which subscribe additional money are the most influential members.

HOW COMMITTEES OPERATE.—Generally, the committees formulate and supervise the policy to be followed in handling the debtors' affairs. The **details and actual operation** are often delegated to one of the committee members best qualified to deal with the specific situation. Frequently the creditors employ a qualified man to act as their representative and pass on all matters relating to the routine management of the business. He is often appointed as treasurer, comptroller and sometimes as a kind of business advisor to the debtor. This appointee virtually acts as a trustee and arranges that all the creditors are dealt with alike and in accordance with the agreement creating the creditors' committee. He should be able, in a short time, to advise the creditors whether the business is in a position to recover or whether it is best to liquidate its affairs. If the former is possible, the committee will continue to administer its affairs and gradually pay the debts of the concern. If the business cannot be continued as it is constituted, it may be necessary to reorganize it and the creditors be forced to take stocks or bonds in the reorganized company in payment of their claims. Creditors' committees in such cases attend to the reorganization and generally dominate the board of directors of the reorganized company. If reorganization is not feasible and it is necessary to liquidate through a receiver in equity, creditors' committees are frequently instrumental in having their representatives selected as receivers.

SOURCE OF AUTHORITY.—The source of authority of creditors' committees is the **voluntary agreement** or contract between the embarrassed debtors and creditors. On the one hand, the creditors delegate to committees chosen from their members their rights to proceed in the best manner to conserve their interests and, on the other hand, the embarrassed debtors surrender the control of their businesses to the committees for the purpose of liquidating their debts.

ADVANTAGES OF CREDITORS' COMMITTEES.—By reason of the source of authority creditors' committees do not possess the legal powers of court receivers. On the other hand, creditors' committees or the executives chosen by them have certain **advantages over court receivers.** Some of these advantages are greater freedom of action and adaptability to changing business conditions without the hampering influence of legal precedent and necessity for obtaining judicial approval for every important business move.

Efficiency and Economy.—The **expenses and costs** of creditors' committees are less than those of court receivers. The members of creditors' committees, by reason of their position to safeguard their interests, give much valuable time to work out solutions of the debtors' problems and sometimes act without compensation. Receivers are entitled to certain statutory fees and in addition in actual practice, receivers invariably have counsel and other assistants, all

of whom are paid out of the estate of the debtor before the creditors are considered.

In many cases the members of creditors' committees and their counsel are substantially compensated for their services. But usually this follows successful administration.

Creditors' committees, by reason of their position, which is one of self-interest, will scrutinize carefully all the expenses of administration and reduce to a minimum such expenses which they cannot eliminate entirely. Court receivers, although theoretically charged with the same care, are not so vitally interested and do not watch expenses so closely.

Creditors' committees are sometimes **composed of business men** in the same or similar lines of trade as the debtors' and know the inherent business problems of the debtors. In addition business men, by training and experience, generally possess those qualities of initiative, courage, and independence of judgment required to meet business crises which have never come up before. Court receivers, on the other hand, are court appointees, very frequently lawyers, often without business training and experience, and by reason of their legal training are cautious, governed by legal precedent and court authority. Such qualifications, good as they are in professional life, are not suited to straighten out the involved affairs of embarrassed concerns.

Expeditiousness.—Administration under court receiverships is often a long drawn out affair, frequently prolonged wherever possible by the receiver and the attorney for the receiver for reasons of self-interest. Creditors' committees, on the other hand, are chiefly interested in settling the claims of the creditors quickly and being relieved from their work as soon as possible.

Publicity.—Unfavorable financial publicity has a detrimental influence on any business. Under creditors' committees concerns are not subject to the widespread publicity incident to procedure under court receiverships. The only publicity under creditors' committees is that caused by credit reporting agencies and credit departments of banks and creditors. This is limited to a comparatively restricted group in the business community more or less directly concerned with the debtor's business. The general public, and sometimes the employees of embarrassed concerns, frequently are not aware of the existence of creditors' committees, whereas court receiverships receive broad publicity through the open court records and proceedings and the public press.

Business Organization Retained.—Under creditors' committees the personnel of business organizations are generally kept intact with the exception of unnecessary and inefficient employees, and possibly the treasurer or comptroller who may be temporarily superseded by the representatives of the creditors' committees. The employees will continue working in the interest of the concern since they hope for its continuance as a going business. When court receivers are appointed, although the personnel may be retained, they generally sense the lack of security in their positions and seek employment elsewhere as soon as possible. This tends to break down the operating efficiency of the business organization.

DISADVANTAGES OF CREDITORS' COMMITTEES.—Court receivers by reason of their positions have certain **authority and power** which creditors' committees do not possess and for that reason the committees must resort to negotiations and other methods to accomplish their purposes.

Setting Aside Unprofitable Contracts.—Court receivers may set aside existing contracts which are burdensome or unprofitable. This is sometimes one of the reasons receiverships in equity are resorted to. Concerns, although solvent

may be tied up with contracts, the enforcement of which would render the businesses insolvent. This was the situation in 1920 and 1921, when many concerns were under contract to take commodities which, in view of the sudden decline of prices, could be bought at much lower prices in the open market. Committees of creditors could accomplish the same purpose by having on the committees the holders of the burdensome contracts and by pointing out to them that insistence, on their part, of fulfillment would cause insolvency and the possible appointment of receivers. Business men, by reason of experience and expediency, are generally inclined to adjust such contracts and retain the good will of their associates and customers rather than be the direct cause of receiverships or bankruptcy, in which case the holders of such contracts would be likely to suffer most.

Setting Aside Claims.—Receivers in equity may set aside and exclude **questionable claims of creditors.** They have authority to review with thoroughness the validity of claims and reject those which are questionable. Committees of creditors could accomplish this by ordinary court action without injury to the concerns or could negotiate and compromise excessive or doubtful claims. Business men possessing the necessary qualities of diplomacy can often effect adjustments of claims of legal validity with greater economy, by reason of business expediency, than by resorting to the uncertainties of formal receiverships in equity or bankruptcy.

Stopping Creditors' Actions.—The greatest power of court receivers lies in stopping the actions of all creditors. The receivers take over concerns and creditors are precluded from taking any further action and must file their claims which are subject to the scrutiny and approval of receivers. Creditors' committees do not possess such powers to stop unreasonable creditors who do not join with them. Their powers are limited to persuasion and negotiation, and if they fail, their only solution is to pay off such creditors. As a matter of policy it is often best to make arrangements, wherever possible, to pay off the small creditors.

Receiverships in Equity

NATURE OF EQUITY RECEIVERSHIPS.—**Courts of equity** assume control and direction of properties in litigation through the appointment of receivers who are the representatives of the courts. **Receivers** are appointed on application of creditors to prevent fraud, protect property from injury, or preserve it from destruction.

RECEIVER DEFINED.—A receiver, as defined by Pomeroy ("Equity Jurisprudence," 3rd Ed., p. 1330) is "a person standing indifferent between the parties, appointed by the court as a quasi-officer or its representative, to hold, manage, control and deal with the property which is the subject matter of or involved in the controversy, under the court's direction, either, (a) where there is no one entitled competent thus to hold it; or (b) where two or more litigants are equally entitled, but it is not just and proper that either of them should retain it under his control; or (c) where a person is legally entitled but there is danger of his misapplying or misusing it; or (d) where he is appointed in like manner and under like circumstances for the purpose of carrying into effect a decree of court concerning the property."

If the estate includes property in several states in which there are creditors, a receiver is appointed in each state. The receiver appointed at the domicile is called the **principal receiver**; those appointed elsewhere are called **ancillary receivers.**

RECEIVERS' POWERS AND DUTIES.—Receivers are subject to the **control and supervision of the court** in their management of property or funds placed in their charge. As soon as appointed, receivers make out a complete inventory of the property and effects coming into their hands. Statutes governing the activities of receivers should always be consulted in cases of receivers in equity.

Receivers must usually proceed to wind up concerns instead of indefinitely continuing them. But in some instances, they may be carried on with the approval of the court. Receivers have certain **discretionary powers** in managing and controlling property in their care. When they exercise discretion and good faith, their acts will ordinarily be confirmed.

Receivers may, with the approval of the court, borrow money to meet necessary operating expenses. Such indebtedness takes precedence over all other debts.

Receivers should pass, in the first instance, upon the **validity and propriety of claims** presented.

Compensation of receivers is fixed by statute, or by the Court in special cases.

RECEIVERS' ACCOUNTS.—Receivers in equity are not required to keep books in any prescribed way. They should, however, keep such accounts as will enable them at any time to prepare such statements of their custodianship as may be required by the court or the creditors. They should inventory all assets taken over by them at what they believe to be fair realizable values. Particular care must be taken to separate the liabilities of estates from those incurred by the receivers. They should keep a record of cash received and disbursed by them.

RECEIVERSHIPS IN EQUITY—THEORY AND PRACTICE.—The purpose of the various laws relating to receiverships in equity is to **conserve the assets** and distribute the proceeds equitably and ratably among the creditors and the debtors. The practical operations of the laws have not always reached this ideal and have proven to be expensive to both debtors and creditors.

The New York *World* in 1923 made an investigation of the operation of equity receiverships under the Federal Courts in New York City. For that purpose its investigators have analysed 233 separate cases and published their results. Although this investigation was confined to the equity receiverships in New York City under the Federal Courts of the Southern District of New York, the conditions and results of the system are probably the same in other parts of the country. Some of the more prominent features of such receiverships brought out by that investigation are worthy of the attention of every financial executive.

VOLUME OF BUSINESS.—From January 1, 1917, to December 31, 1923, the Federal Courts of the Southern District of New York had taken over 233 separate business enterprises with nominal assets of over $750,000,000, not including unimportant ancillary receiverships.

The investigation revealed that the courts either on judicial orders or in receivers' reports have **authorized payments** of $7,695,498.46 as follows:

Compensation for receivers	$3,405,086.96
Compensation of attorneys for receivers	2,610,636.83
Compensation of other attorneys	883,780.82
Compensation of special masters	151,731.49
Compensation of appraisers, accountants, engineers, etc.	644,262.36
	$7,695,498.46

FEW BUSINESSES SAVED BY RECEIVERSHIPS.—In a great majority of instances such receiverships ended the business life of the concerns. Out of 233 firms put in liquidation, only 35 have reorganized on a basis to give creditors nominal payment in full. Such payments in nearly all of the 35 instances have been made by stocks, bonds or notes of the reorganized firms and not in cash. The value of such securities depends entirely on the future success of the reorganized companies.

Before acquiescing in an equity receivership financial executives should ascertain whether other more desirable alternatives have been exhausted. Adjustments by compositions or management by creditors' committees are usually much better for both debtors and creditors. Before consenting to equity receiverships the following objections should be considered:

There have been repeated appointments of certain lawyers to positions as receivers, attorneys for receivers or special masters out of which the recipients made large incomes. The services rendered may or may not have been worth the cost. In some liquidations the allowances to receivers and attorneys, with other expenses of the receiverships, have exhausted from 50 to 100% of the funds that would otherwise have been available for the unsecured creditors

The receivers have frequently conducted operations for the court at a loss, thereby further depleting the assets available for distribution among the creditors. In some instances, however, the operations of the businesses enabled the receivers to sell them as going concerns to the advantage of creditors.

As a result of receivers conducting businesses, instances have occurred where receivers' certificates of indebtedness have been dishonored because when the receivers completed their operations, there was not even enough left to pay these certificates, to say nothing of the claims of the creditors.

RESULTS OF RECEIVERSHIPS.—The New York *World* said that returns on all the 233 cases were incomplete, and it was impossible to determine exactly how much the creditors received, compared with the $7,700,000, paid to receivers, attorneys for receivers, etc., for administering the properties but that approximate figures could be given. Out of a total of 233 receiverships the general unsecured creditors fared as follows:

In 26 receiverships the creditors received nothing. In 28 cases they ended in adjudication in bankruptcy with slight chances of recovering anything. In 42 cases it was indicated that creditors would receive not more than 75% of their claims as allowed. In most of them, the percentage was much less than this, in some instances running as low as 1%. In 24 cases the reports indicated that the creditors would receive something in excess of 25% but less than 100%. In 29 cases creditors were not paid in full and the available data was insufficient to warrant even a guess as to how much they would eventually receive. In 49 cases not the slightest indication was found of what was ultimately going to happen to the creditors. In 35 cases it was indicated that the creditors would be or were paid in full by the issuance to them in most instances of stocks, bonds or notes of a reorganized company. Actual cash payment in full was made in only a few instances.

REPORTS OF U. S. ATTORNEY GENERALS ON RECEIVERSHIPS.—Another view of the expensiveness of receiverships in general, whether in equity or in bankruptcy, may be found in the annual reports of the Attorney General of the United States as quoted by the Merchants' Association of New York in a report of its Committee on Bankruptcy Reform dated March 6, 1924. These figures show that the **expenses of administering bankrupt estates** during

1918, 1919, 1920 and 1921 averaged 40% of the amounts paid to general creditors; which were as follows:

	Amounts Paid to General Creditors	Expenses	Percentage of Expenses on the Amounts Paid General Creditors
1918.....	$18,667,790.00	$ 6,798,367.00	36.4
1919.....	16,130,469.00	6,565,916.46	40.7
1920.....	13,673,820.00	6,355,443.13	46.4
1921.....	12,786,254.87	4,834,640.64	37.8
Totals....	$61,258,333.87	$24,554,367.23	40.0
Average..	$15,314,583.47	$ 6,138,591.81	40.0

In the Southern District of New York the figures show an even larger percentage than for the United States as a whole. The figures for the Southern District of New York show 62% as follows:

	Amounts Paid to General Creditors	Expenses	Percentage of Expenses on the Amounts Paid General Creditors
1918.....	$1,683,183.00	$1,120,440.66	66.5
1919.....	1,255,549.00	1,028,927.13	81.9
1920.....	1,181,507.00	758,475.63	64.1
1921.....	1,606,614.22	646,726.74	40.2
Total.....	$5,726,853.22	$3,554,570.16	62.0
Average..	$1,431,713.30	$ 888,642.54	62.0

The most significant element of the expenses of these cases seems to be the unusually large portion paid for **fees and expenses of attorneys** and others not officers of the court. As shown in the following summary, prepared from the reports of the Attorney General, the amounts paid to court officers for the four years averaged only 33.3% of the amounts paid to attorneys and for other expenses for the United States as a whole, and only 29.7% for the Southern District of New York.

	1918	1919	1920	1921	Average
For the Entire United States:					
Fees and expenses of Referees, Marshals, Receivers and Trustees..	$1,236,618	$1,864,923	$1,626,202	$1,413,930	$1,535,418
Attorneys, and other expenses.....	5,561,748	4,720,991	4,729,240	3,411,710	4,605,922
Totals.....	$6,798,366	$6,585,914	$6,355,442	$4,825,640	$6,141,340
Percentage of amounts paid to Referees, etc., on amounts paid attorneys and for other expenses.....	22.2	39.5	34.3	41.4	33.3
For the Southern District of New York:					
Fees and expenses of Referees, Marshals, Receivers and Trustees..	$ 235,419	$ 207,402	$ 188,752	$ 182,358	$ 203,483
Attorneys, and other expenses.....	885,023	821,524	569,723	464,368	685,159
Totals.....	$1,120,442	$1,028,926	$ 758,475	$ 646,726	$ 888,642

Percentage of amounts paid to Referees, etc., on amounts paid attorneys and for other expenses.....	26.6	25.2	33.1	39.2	29.7

ACCOUNTANTS AS RECEIVERS—EXPERIENCE IN ENGLAND.—The financial executive should take an interest in the type of receivers who are being appointed. If experienced business men cannot devote the necessary time to the work it may be that the British system could be adopted in the United States.

Lawyers are not usually appointed in Great Britain as trustees and receivers. The creditors prefer that **a public accountant** should act in this capacity and a small committee of two or three creditors generally co-operates with the accountant in the winding up of the business. The creditors control the proceedings in about 85% of the cases. In the other 15%, the appointment of an official receiver (who is an officer of the high court of justice) is usually to punish the debtor. Such official receiver may ignore the wishes of the creditors, who have no control over him, as he takes his orders from the high court. As a matter of fact, that usually means that he administers the affairs without interference of any kind. The only way in which lawyers are employed in British bankruptcies is in the presentation of petitions in bankruptcy, drawing deeds of arrangement with creditors and acting as legal counsellors in a very restricted degree for the trustee. Special applications to the court by official receivers, or to the creditors by accountants acting as trustees must be made before lawyers may be employed by trustees in bankruptcy. The official reports of the inspector general in bankruptcies show only two kinds of trustees, namely, official receivers and non-official trustees.

British creditors appear to have a pronounced preference for accountants as trustees in the belief that accountants will work in co-operation with the creditors and thus bring about the best adjustment possible in the circumstances. These facts should be impressed upon the American business man and also upon courts. It is not certain that trusteeships or receiverships are likely to prove the most lucrative part of an accountant's practice, but, in the interest of the public, the man best fitted to administer affairs should be appointed, and the old theory of appointing friends of the court or political lame ducks which has sometimes prevailed should be entirely abandoned. The purpose of proceedings in bankruptcy and administration of bankrupt estates should be the protection of the creditor rather than the personal glory and emolument of the one appointed administrator.

Bankruptcy

GENERALLY THE LAST RESORT.—Bankruptcy is the last resort, either for debtors involved in financial difficulties, or for creditors who seek to obtain adequate settlement of their claims. Although such proceedings are definite and conclusive, they **ruin debtors' credit standing,** and, as shown by experience, yield to creditors smaller financial returns of their claims than could be obtained by other methods.

Bankruptcy in some instances is necessary, particularly where recourse must be taken to recover property that may have been concealed or transferred, or in cases where there may be an element of fraud. Sometimes even in such cases less drastic procedures would serve the same purpose.

Bankruptcy is objectionable because of the **relatively small dividends** paid to creditors. This is sometimes due to the failure of creditors to assert their rights. The National Association of Credit Men, in the Credit Men's Diary and Manual of Commercial Laws, 1921 states that:

"The unsatisfactory outcome in many bankruptcy cases can be traced to the failure of creditors to exercise their full rights and perform their full duties, and the National Association of Credit Men will continue to urge that its members take an active part in the administration of all bankrupt estates in which they may be so unfortunate as to become involved, not only that the realization in such cases shall be as great as possible, but more especially to protect the system from abuse and discourage frauds and extravagance in its administration.

"It must be remembered that loss is inevitable when insolvency occurs, but a careful administration and a painstaking interest in each case will serve to minimize losses and increase dividends. The small dividends paid by many bankrupt estates can be accounted for wholly through lack of interest and attention on the part of creditors. . . ."

LIMITATIONS OF THIS SECTION.—Reference to the works of **Remington, Collier** and **Loveland,** who are authoritative writers on the subject, may be necessary to supplement the brief discussion of several phases of the law as presented in this section. Generally it is recommended that reputable counsel be employed when involved in any legal matter, particularly that of bankruptcy. As a matter of fact, it is imperative that debtors and creditors do so to protect, properly, their legal rights.

National Bankruptcy Law

SOURCE OF AUTHORITY.—The Constitution of the United States in Article 1, Section 8, Clause 4 provides that: "Congress shall have power to establish . . . . uniform laws on the subject of bankruptcies throughout the United States."

"The Constitution of the United States authorizes Congress, in its wisdom, to enact bankruptcy legislation, and when such action is taken it is the supreme law of the land on the subject." (*Lea* v. *George M. West Co.*, 91 Fed. 237.)

BANKRUPTCY LAWS OF THE UNITED STATES.—Congress under Constitutional power thus granted has enacted four successive bankruptcy laws. The Act of 1800, repealed in 1803; the Act of 1841, repealed in 1843; the Act of 1867, repealed in 1878; and the Act of 1898 which was amended in 1903, 1906 and 1910.

BANKRUPTCY LAWS IN FORCE AT PRESENT.—The Bankruptcy Laws in force at present consist of (1) the Act of 1898, (2) its amendments, (3) certain General Orders adopted by the Supreme Court of the United States, and (4) the equity rules of that court.

BANKRUPTCY AND INSOLVENCY LAWS.—**Insolvency laws** are state laws which vary in the different states in their scope and operation, whereas the **bankruptcy laws** are federal laws which apply uniformly throughout the United States and supersede the various state insolvency laws.

The prevailing state insolvency and federal bankruptcy laws are similar in many respects. Both are designed to effect a safe custody of the property of insolvent debtors and a fair distribution of such assets among the creditors in payment of claims. Both are measures to relieve the debtors, although differing

in scope. In proceedings before it the Supreme Court of the United States considers the two terms, insolvency and bankruptcy, as practically synonymous, particularly in interpreting cases under the bankruptcy laws.

The insolvency laws of the several states and the federal bankruptcy laws, despite their apparent similarity, are, however, **distinctly different** in rank, operation and effect. The bankruptcy laws discharge absolutely the proved debts (except claims of the United States) and debtors, whereas the insolvency laws, originally intended to relieve debtors from arrest and imprisonment, leave their obligation to pay their debts in full force. State insolvency laws differ in the various states and are subordinated to, and are of no effect wherever they are in conflict with the federal bankruptcy laws.

The terms "bankruptcy" and "insolvency" are not entirely synonymous. In general usage insolvency refers to the condition when debtors cannot pay their debts as they mature, whereas bankruptcy refers to the formal act or process of becoming bankrupt under the federal laws. Many persons and concerns at certain times may be found to be unable to meet their debts as they mature and are technically insolvent. They do not, however, become bankrupt until they have been judicially adjudicated to be such by courts having jurisdiction.

PURPOSE OF BANKRUPTCY.—"The Bankruptcy Act . . . . was designed to relieve unfortunate but honest debtors, and to secure a proper distribution of their assets among their creditors. The latter object is quite as important as the former." (*In re Scott*, 126 Fed. 981.)

"The distribution of the property is the principal object to be attained—the discharge of the debtor is incidental and subordinate." (*In re Swofford Bros. Dry Goods Co.*, 180 Fed. 549.)

"The cardinal principle of the Bankruptcy Act is to grant to creditors only those rights which would have been theirs if bankruptcy had not supervened, and to save to the bankrupt and his family every right and exemption which would have been theirs as against creditors enforcing their claims by ordinary judicial process." (*Thomas* v. *Woods*, 173 Fed. 585.)

DEFINITIONS.—The Bankruptcy Act defines certain words and phrases used in the Act and proceedings relating thereto.

Debtors, within the meaning of the law, may be individuals, partnerships or corporations.

Adjudication means the date of the entry of a decree that the defendant in a bankruptcy proceeding is a bankrupt, or, if such a decree is appealed from, the date when such a decree is finally confirmed.

Creditor includes everyone who has a demand or claim provable in bankruptcy.

Corporations include limited partnerships and other associations having subscribed capital which alone is responsible for the debts.

Debt includes any debt, demand or claim payable in bankruptcy.

Petitions means a paper filed in a court of bankruptcy.

Conceal includes in its meaning, falsify and mutilate.

Secured creditors include creditors who have security for their debts upon the property of bankrupts.

Transfer includes the sale and every other mode of disposing of property, absolutely or conditionally, as a payment, pledge, mortgage, gift or security.

Wage-earner means an individual who works for wages, salary, or hire at a rate of compensation not exceeding $1,500 a year.

A bankrupt is a debtor who is unable to meet his debts and who has been judicially declared a bankrupt in accordance with the terms of the law.

To the Hon **Judge of the District Court**
of the United States for the **District of**

The Petition of
of the of , in the County of
and District and State of

State Occupation or Profession

Respectfully Represents: That he has had his principal place of business [*or has resided or has his domicile*] for the greater portion of six months next immediately preceding the filing of this Petition at within said Judicial District; that he owes debts which he is unable to pay in full; that he is willing to surrender all his property for the benefit of his creditors, except such as is exempt by law, and desires to obtain the benefit of the Acts of Congress relating to Bankruptcy.

That the Schedule hereto annexed, marked A, and verified by your petitioner's oath, contains a full and true statement of all his debts, and (so far as it is possible to ascertain) the names and places of residence of his creditors, and such further statements concerning said debts as are required by the provisions of said Acts.

That the Schedule hereto annexed, marked B, and verified by your petitioner's oath, contains an accurate inventory of all his property, both real and personal, and such further statements concerning said property as are required by the provisions of said Acts:

Wherefore, your Petitioner Prays: that he may be adjudged by the Court to be a bankrupt within the purview of said acts.

Petitioner.

Attorney for Petitioner.

United State of America,
District of } ss.
County of

I, , the petitioning debtor mentioned and described in the foregoing Petition, do hereby make solemn oath that the statements contained therein are true, according to the best of my knowledge, information and belief.

Subscribed and sworn to before me this day of A. D., 19 } . Petitioner

Official Character.

N. B.—Oaths to the above petition, and the schedules thereto annexed, may be administered by officers authorized to administer oaths in proceedings before Courts of the United States, or under the laws of the State where the same are to be taken; and diplomatic or consular officers of the United States in any foreign Country.

Petitioner's attorney cannot act as notary.

FIG. 1. Petition in Bankruptcy

VOLUNTARY BANKRUPTCY.—A debtor is a **voluntary** bankrupt when he petitions the court that he be adjudged a bankrupt. In effect he is asking the court for the relief afforded by the law.

Voluntary bankruptcy proceedings **are deemed inadvisable** even in extreme cases and should not be made use of except as a last resort. Where, however, debtors are hopelessly involved and overwhelmed with business losses caused by economic conditions which cannot be overcome or through errors of judgment resulting in losses which are so great as to preclude a reasonable possibility of being able to recoup them in the ordinary course of business, justification exists for voluntary petition in bankruptcy. The bankruptcy laws are designed to give relief in such cases.

Even in such situations other steps should be taken, if possible, rather than resort to voluntary bankruptcy. **Amicable settlement** with the creditors or administration of debtors' affairs by creditors' committees is preferable. Such a course is likely to be less costly to all concerned and avoids, to a degree, the stigma of actually having been adjudged a bankrupt.

The **form of petition** to be used by voluntary bankrupts is shown by Fig. 1.

INVOLUNTARY BANKRUPTCY.—Involuntary bankruptcy is the result of a petition of one or more creditors to a court that a debtor be declared a bankrupt. The petition must be based on the commission of an **act of bankruptcy** and be made by a proper number of creditors. The form of creditors petition is set forth in Fig. 2.

TO THE HONORABLE ....., Judge of the District Court of the United States for the ..... District of ....*New York*....:

THE PETITION OF ..... respectfully shows:

THAT ....., of ....., *New York*...., has for the greater portion of six months next preceding the date of filing this petition, ...*had his principal place of business*.... at ..... *Street*, ..., *New York*.... in the County of ....., and State and District aforesaid, and owes debts to the amount of ....*$1,000*....

THAT YOUR ....*petitioners are creditors*.... of said ....., having provable claims amounting in the aggregate, in excess of securities held by ....*them*...., to the sum of ....*$500*.... That the nature and amount of your ....*petitioners'*.... claims are as follows:

..... *& Company—machinists' supplies furnished—balance due $300*....

.....*—paint furnished—balance due $150*....

.....*—automobile hire—balance due $210*....

AND YOUR ....*petitioners*.... further ....*represent*.... that said .... is insolvent, and that within four months next preceding the date of this petition the said ..... committed an act of bankruptcy, in that ....*he*.... did heretofore, to wit, on the ....*tenth*.... day of ....*December*.... A. D. 19.., pay to ....., the sum of ....*Two Hundred* ($200) .... Dollars, with intent while insolvent to prefer said creditor over others.

WHEREFORE, YOUR ....*petitioners pray*.... that service of this petition, with a subpoena, may be made upon ....., as provided in the acts of Congress relating to bankruptcy, and that ....*he*.... may be adjudged by the Court to be a bankrupt within the purview of said acts.

....

....

Attorney. Petitioners.

NOTE: To be acknowledged in joint jurat by all petitioners before an authorized official.

FIG. 2. Creditors' Petition in Bankruptcy

When acts of bankruptcy have been committed, particularly those involving the element of fraud or injustice to creditors, or if some of the creditors are opposed to an amicable settlement of debtors affairs, the most effective means of meeting the situation, to protect the interests of all the creditors, is through the definite and exclusive processes of the bankruptcy laws.

WHO MAY BECOME BANKRUPT.—

Voluntary.—All persons, **natural or artificial,** including partnerships, capable of contracting, except municipal, railroad, insurance, and banking corporations, who owe debts, may become voluntary bankrupts. (Section 4, Bankruptcy Law.)

Involuntary.—Natural persons, except wage-earners whose compensation does not exceed $1,500 a year, or farmers or persons engaged chiefly in tilling the soil, owing debts to the amount of $1,000 or more, may become involuntary bankrupts (Section 4b, Bankruptcy Law.)

Unincorporated companies, partnerships and corporations, except municipal, railroad, insurance and banking corporations, having debts of $1,000 or over, may become involuntary bankrupts. (Section 4b, Bankruptcy Law.)

Partnerships, during the continuance of partnership business, or after dissolution but before final settlement, may be adjudged bankrupts on petition of the members of such partnerships or of their creditors.

All the members of a partnership may unite in a voluntary petition. A non-joining member has the right to resist such a petition. Individual **partners** may file personal voluntary petitions in bankruptcy independent of the partnerships.

Where some of the partners are adjudged bankrupts and some are not, the partnership property will not be administered in bankruptcy, without the consent of the non-bankrupt partners; such partners shall settle partnership business as expeditiously as possible and account for the interest of the partners adjudged bankrupt.

The bankruptcy laws regard partnerships for administrative purposes as **distinct entities** from the partners who constitute the firm.

Marshaling of Assets refers to the application of assets, to the liquidation of debts of the firm and the individual members thereof, and applies where firm assets and individual assets of its members are before a court of equity for distribution, as in the case of insolvency of the firm and of its members individually. (*United States* v. *Lewis*, 92 U. S. 618.) The rule then is that firm debts must be paid out of firm property, and private debts out of private property; and no resort can be had by the one class of creditors to the fund belonging to the other until their own fund has been first exhausted. (*Pahlman* v. *Graves*, 26 Ill. 405.)

Creditors of a partnership can look only to the surplus of the separate estate of the members of the firm after the payment of the separate debts, and separate creditors can seek indemnity only from the surplus of the joint fund after the satisfaction of joint creditors. (*McCulloh* v. *Dashiells Adm.*, 1 Har. & G. 96.)

The procedure to be followed by creditors of partnerships is the same as against individual debtors.

ACTS OF BANKRUPTCY.—There are **five acts of bankruptcy** specified which, summarized, are:

1. The fraudulent conveyance or concealment of property.
2. An illegal preference while insolvent.

3. The seizure of a debtor's property under legal proceedings not vacated within 5 days, the debtor being at the time insolvent.
4. The making of a general assignment for the benefit of creditors, or the application for the appointment of a receiver of an insolvent, or the appointment of such receiver.
5. An admission in writing of insolvency and of a willingness to be adjudged a bankrupt.

One or more acts of bankruptcy must be proved before a debtor may be declared bankrupt.

1. **The first of these acts occurs when the debtor conveys, transfers, conceals, removes or permits to be concealed or removed, any part of his property with intent to hinder, delay or defraud his creditors.**

The intent to defraud creditors is the essence of this act and must be shown with reasonable certainty and clearness in the creditors' petition. A mere suspicion is not sufficient to sustain a petition to have the debtor declared bankrupt.

Transfer includes the "sale and every other and different mode of disposing of or parting with property, absolutely or conditionally, as a payment, pledge, mortgage, gift or security."

Conceal includes also "secrete, falsify and mutilate."

2. **The second act of bankruptcy is committed when the debtor transfers, while insolvent, any portion of his property to one or more of his creditors with intent to prefer such creditor or creditors over his other creditors.**

Preference is the essence of this act. The important point is that the preference is made intentionally and with the acquiescence of creditors while the debtor is insolvent.

What Constitutes Preference.—To establish a preference, insolvency must be alleged and found as a fact, and the intent of the debtor to prefer must be proved. Therefore, the provisions of the Bankruptcy Act forbidding transfers, etc., of assets after insolvency does not invalidate payments made in the usual course of business before the commission of an act of bankruptcy and not in contemplation thereof, though the enterprise, if wound up at the time, would in fact be unable to meet its obligations. In other words, it cannot be said that all payments, transfers, etc., after or in contemplation of insolvency are preferences, if made in due course of business and if not made with a view to prefer one creditor to another. For instance, if after or in contemplation of insolvency a security is given for a debt then created, without fraud in fact, and intended merely to adequately protect a loan made at the time, the transfer of the security is not a preference.

Two illustrations of preferences, taken from reported cases, are given below:

November 6, 1899, Lyon owed Batten & Co. $1,888.61 for advertising. This account was reduced by cash payments until at December 31, 1899, $630.47 was due. During December additional advertising was done for which Lyon was charged $546.02. And it is for this sum that claim was filed. The court refused to allow this claim unless Batten & Co. surrendered the sum of $210.15 alleged to have been paid to them by the bankrupt while insolvent. The $210.15 which was thus held to be a preference, represented a check, dated January 20, 1900, delivered to the payee January 2, 1900, in payment of the final one-third of the account for $630.47. The previous payments on this

amount were made prior to January 20, the day the debtor became insolvent; but the third check, the one in controversy, was deposited by Batten & Co. in their bank on January 20, and was paid by the drawee bank on January 21, one day after insolvency.

One Sizer on December 23, 1899, sold to the bankrupt merchandise of the value of $232.46, for which he received

Jan. 24, 1900	Cash	$ 29.68
Jan. 24, 1900	Note, payable and paid Apr. 23	200.00
Jan. 31, 1900	Cash	2.78
		$232.46

At subsequent dates Sizer sold the bankrupt merchandise as follows:

Mar. 10	$357.80
Aug. 16	20.62
	$378.42

It was held that the payment on April 23 of the note for $200 was a preference, and should be returned as a condition of proving debts arising on and after March 10.

On March 10, after the giving of the note and before its maturity (April 23) and payment, the bankrupt bought goods amounting to $357.80, so that at such date the bankrupt owed Sizer the note representing an account for goods sold and the additional sum of $357.80. While the payment was distinctly on the note, and for the purpose of extinguishing it, yet it was a partial payment of a portion of the whole amount of the indebtedness owing from the bankrupt to the creditor.

Preferences obtain only in bankruptcy proceedings. But it is often found desirable in proceedings in insolvency, in cases where there may be present the essentials of a preference, to supersede the insolvency proceedings by a petition in involuntary bankruptcy in order to invoke the rule of preferences and thus insure an equitable distribution of the estate.

3. The third act of bankruptcy occurs when the debtor has, while insolvent, suffered or permitted any creditor to obtain a preference through legal proceedings, and has not vacated or discharged such preference at least 5 days before final disposition of any property affected by such preference.

Preference through legal proceedings constitutes the essence of this act, which is also termed the **passive act of bankruptcy.** The debtor commits no overt act but merely permits, while insolvent, certain creditors to obtain an advantage over others through legal process. Debtors who permit judgments and liens to be obtained against them are the chief offenders.

What Constitutes Preference Through Legal Proceedings.—"A person shall be deemed to have given a preference if, being insolvent, he has, within four months from the filing of the petition and before adjudication, procured or suffered a judgment to be entered against himself in favor of any person or made a transfer of any of his property, where the effect of the enforcement of such judgment or transfer will be to enable anyone of his creditors to obtain a greater percentage of his debt than any other of such creditors of the same class.[8]

A chattel mortgage, a lien, a sale, payment on a note, giving security on an

[8] Bankruptcy Laws, Section 60.

existing debt, and every other mode of disposing of or parting with property or the possession of property, absolutely or conditionally, as a payment, pledge, mortgage, gift, or security, is a transfer, and, contingent upon the facts, may be a preference.[9] Creditors who have received preferences, conveyances, etc., may not have their claims allowed unless such preferences are surrendered.

When Preferences May be Set Aside.—Preferences are **voidable** by the trustee and the property may be recovered from persons benefited thereby if:

(a) Given within 4 months of the petition in bankruptcy.

(b) Given for a pre-existing debt after filing petition and before adjudication.

(c) The debtor was insolvent when the preference was made and within four months of the time the petition was filed.

(d) The person receiving the preference then had reasonable cause to believe that the enforcement of the transfer of property would leave the debtor insolvent and would effect a preference under the bankruptcy law.

4. A debtor commits the fourth act of bankruptcy when he makes a general assignment for the benefit of creditors, or, being insolvent, has a receiver or trustee put in charge of his property under the laws of a state.

The making of such assignments is frequently done for the purpose of bringing the estates of debtors under the jurisdiction of the state courts. Such an act is, however, ground for bankruptcy under the federal statutes.

The **assignment section of the Bankruptcy Law** is sometimes a barrier to more economical settlement. This act of bankruptcy is frequently looked upon as a stumbling block in the federal law standing in the way of proceedings under the various state insolvency laws, state assignment laws, creditors' committees, and other remedies, which are sometimes available in certain states, and to be preferred, where feasible, to the more drastic proceedings in bankruptcy.

Where Bankruptcy Act Does Not Apply.—Where the assignment is made for a valid consideration, or insolvency cannot be affirmatively shown, an act of bankruptcy is not committed.

5. The fifth act of bankruptcy occurs when a debtor admits in writing his inability to pay his indebtedness and his willingness to be adjudged a bankrupt on that ground.

Admission by the debtor is sufficient. Under this section the debtor virtually becomes a voluntary bankrupt.

Although willingness to be adjudged a bankrupt is to be deprecated, conditions may arise in business wherein it would appear to be the only solution. An insolvent debtor would be justified in resorting to the remedies under this section when he is forced by harsh and unreasonable creditors, particularly if some of them may be in a position to obtain unfair advantages over others who are more reasonable.

PETITIONS IN BANKRUPTCY—GENERAL.—Proceedings are begun by filing a formal petition in bankruptcy, voluntary or involuntary. The successive steps are based on subsequent petitions and motions in accordance with the nature of the proceeding.

The Bankruptcy Act does not prescribe the form or contents of the petition in either voluntary or involuntary proceedings. The general orders in bankruptcy of the Supreme Court prescribe the forms to be used, but in the case of an

[9] Bankruptcy Laws, Section 1, Sub. 25.

involuntary petition the form leaves a blank as to the nature and amount of petitioners' claims and as to the act of bankruptcy complained of to be filled in by the petitioners. The general character of these forms has afforded opportunity to pervert the Act by confusing the proceedings in voluntary and involuntary bankruptcies.

Certain **prescribed forms** are used which are uniform throughout the country. These forms are largely self-explanatory. Specimens of the more important ones are reproduced in this section. Should readers have occasion to use such forms complete sets may be obtained from law stationers.

The courts require reasonable accuracy and completeness in the preparation of all the papers used in proceedings in bankruptcy. Various schedules must be filed in triplicate, each copy signed by the petitioner, and affidavits made to accompany the schedules. The forms indicate where signatures and affidavits are required.

Debtors' schedules must contain full statements of assets and liabilities setting forth the major items specifically and with such detail as to be capable of identification. Damage suits and creditors' claims of whatever nature, although apparently groundless, should be stated at the maximum amount alleged to be due. **Contingent liabilities** should also be stated.

The bankrupt or any creditor may take exception to the petition and plead against the proceeding. The parties may question any material facts alleged in the petition, such as the jurisdiction of the court and whether or not an act of bankruptcy was committed, or statements made regarding the provable claims of the petitioning creditors.

PETITION BY DEBTORS—VOLUNTARY.—Individual debtors filing voluntary petitions in bankruptcy should use petition shown in Fig. 1 and schedules shown in Figs. 3 to 14.

The petitions and schedules for **partnerships or corporations** are substantially the same as those for individuals, with slight changes in the wording of the petitions to identify the partnerships or the corporations. The corporate form of petition shown in Fig. 15 must be accompanied by schedules similar to those for individuals. (Figs. 3 to 14, inclusive.)

In partnership petitions, each partner must file a complete set of schedules of his personal assets and liabilities.

Statement of all Debts of Bankrupt.

SCHEDULE A. (1) No._____

Statement of all creditors who are to be paid in full or to whom priority is secured by law.

CLAIMS WHICH HAVE PRIORITY.		AMOUNT Dollars.	Cents.
1. Taxes and debts due and owing the United States.			
2. Taxes due and owing to the State of or to any County, District or Municipality thereof.			
3. Wages due workmen, Clerks or Servants, to an amount not exceeding $300 each, earned within three months before filing the petition.			
4. Other Debts having priority by law.			

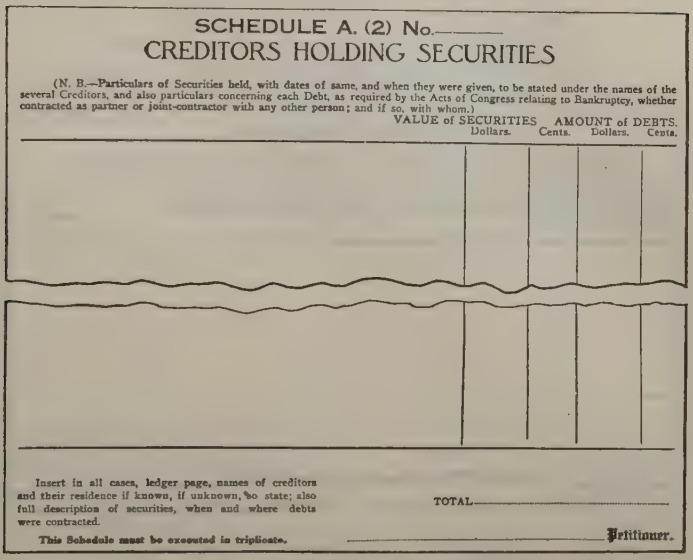
Insert in all cases, ledger page, names of creditors and their residence, if known, or unknown, so state, when and where debt was contracted; nature and consideration of the Debt, and whether contracted as partner or joint contractor, and, if so, with whom.

TOTAL_____

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 3. Schedule A (1) in Bankruptcy



SCHEDULE A. (2) No.———

CREDITORS HOLDING SECURITIES

(N. B.—Particulars of Securities held, with dates of same, and when they were given, to be stated under the names of the several Creditors, and also particulars concerning each Debt, as required by the Acts of Congress relating to Bankruptcy, whether contracted as partner or joint-contractor with any other person; and if so, with whom.)

VALUE of SECURITIES — Dollars. Cents.
AMOUNT of DEBTS. — Dollars. Cents.

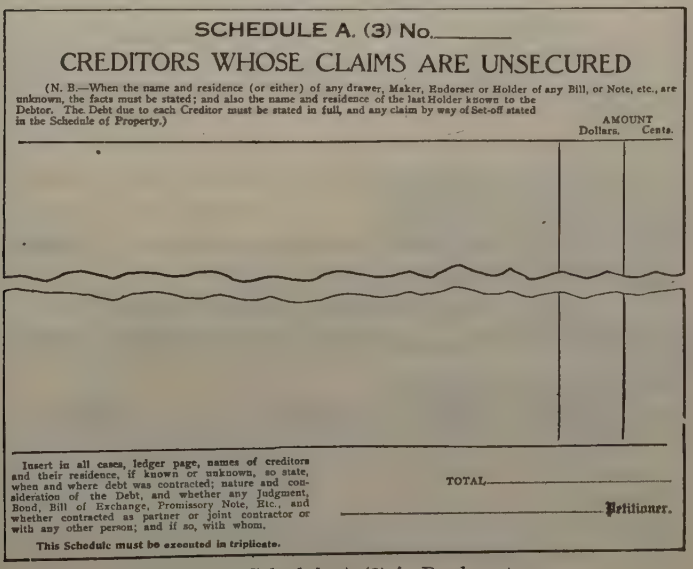
Insert in all cases, ledger page, names of creditors and their residence if known, if unknown, so state; also full description of securities, when and where debts were contracted.

TOTAL———

This Schedule must be executed in triplicate.

———Petitioner.

FIG. 4. Schedule A (2) in Bankruptcy



SCHEDULE A. (3) No.———

CREDITORS WHOSE CLAIMS ARE UNSECURED

(N. B.—When the name and residence (or either) of any drawer, Maker, Endorser or Holder of any Bill, or Note, etc., are unknown, the facts must be stated; and also the name and residence of the last Holder known to the Debtor. The Debt due to each Creditor must be stated in full, and any claim by way of Set-off stated in the Schedule of Property.)

AMOUNT
Dollars. Cents.

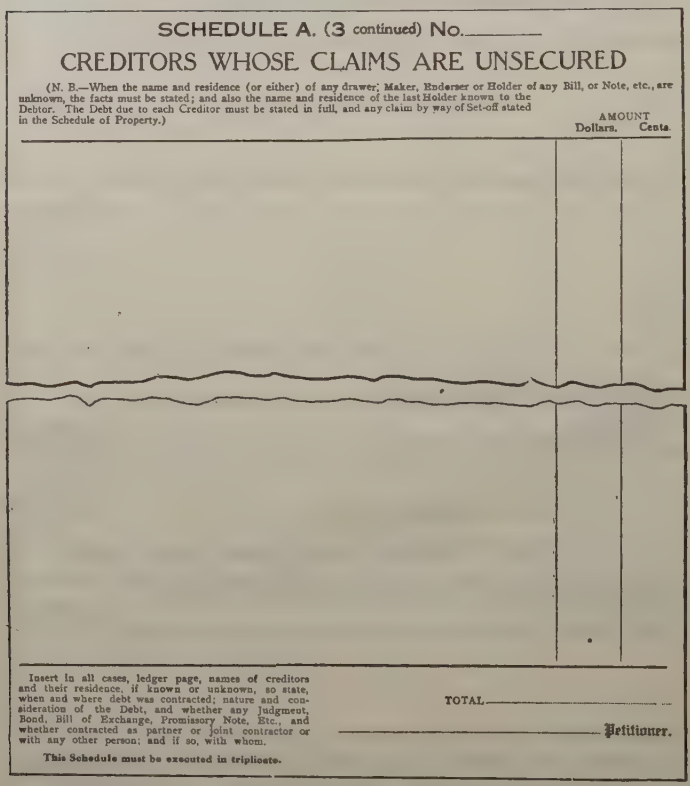
Insert in all cases, ledger page, names of creditors and their residence, if known or unknown, so state, when and where debt was contracted; nature and consideration of the Debt, and whether any Judgment, Bond, Bill of Exchange, Promissory Note, Etc., and whether contracted as partner or joint contractor or with any other person; and if so, with whom.

TOTAL———

This Schedule must be executed in triplicate.

———Petitioner.

FIG. 5a. Schedule A (3) in Bankruptcy



SCHEDULE A. (3 continued) No._____

CREDITORS WHOSE CLAIMS ARE UNSECURED

(N. B.—When the name and residence (or either) of any drawer, Maker, Endorser or Holder of any Bill, or Note, etc., are unknown, the facts must be stated; and also the name and residence of the last Holder known to the Debtor. The Debt due to each Creditor must be stated in full, and any claim by way of Set-off stated in the Schedule of Property.)

AMOUNT
Dollars. Cents.

Insert in all cases, ledger page, names of creditors and their residence, if known or unknown, so state, when and where debt was contracted; nature and consideration of the Debt, and whether any Judgment, Bond, Bill of Exchange, Promissory Note, Etc., and whether contracted as partner or joint contractor or with any other person; and if so, with whom.

TOTAL_____

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 5b. Schedule A (3) in Bankruptcy (Continued)

In supplying information as to "when and where" debts due merchandise creditors were contracted, and the "nature and consideration of the debt," it is usually sufficient to state merely:

"Merchandise creditors, as follows:

Jno. V. Smith Co., 96 Branch St., Bontown, N. Y.	$2,750.00
Wm. Smith Co., 97 Main St., Bontown, N. Y.	3,750.00
Etc."	

SCHEDULE A. (4) No._____

LIABILITIES ON NOTES OR BILLS DISCOUNTED, WHICH OUGHT TO BE PAID BY THE DRAWERS, MAKERS, ACCEPTORS OR ENDORSERS.

(N. B.—The dates of the Notes or Bills, and when due, with the Names, Residences, and the Business or Occupation of the Drawers, Makers or Acceptors thereof are to be set forth under the Names of the holders. If the Names of the Holders are not known, the Name of the last Holder known to the Debtor shall be stated and his business and place of residence. The same particulars as to Notes or Bills on which the Debtor is liable as Endorser.)

AMOUNT
Dollars. Cents

Insert in all cases, ledger page, names of holders as far as known, if unknown, so state; their residence if known, if unknown so state; place where debt was contracted; nature of liability, whether same was contracted as partner or joint contractor, or with any other person; and if so, with whom.

TOTAL_____

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 6. Schedule A (4) in Bankruptcy

SCHEDULE A. (5) No._____

ACCOMMODATION PAPER.

(N.B.—The dates of the Notes or Bills, and when due, with the Names and Residences, of the Drawers, Makers and acceptors thereof, are to be set forth under the Names of the holders; if the bankrupt be liable as Drawer, Maker, Acceptor or Endorser thereof; it is to be stated accordingly. If the names of the Holders are not known, the Name of the last Holder known to the Debtor should be stated, with his residence. The same particulars as to other commercial paper.)

AMOUNT
Dollars. Cents.

Insert in all cases, ledger page, names of holders, residence, if known, if unknown, so state; names of and residence of persons accommodated; place where contracted; whether liability was contracted as partner or joint contractor, or with any other person, and if so, with whom.

TOTAL_____

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 7. Schedule A (5) in Bankruptcy

N.B.—The following form of Oath to Schedule A of the Petition by Debtor is prescribed and is to be annexed to the same.

OATH TO SCHEDULE A.

United States of America
District of } ss.

On this day of A. D. 19

before me personally came

the person mentioned in and subscribed to the foregoing Schedule, and who, being by me first duly sworn, did declare the said Schedule to be a statement of all his debts, in accordance with the Acts of Congress relating to Bankruptcy.

Subscribed and sworn to before me this day of

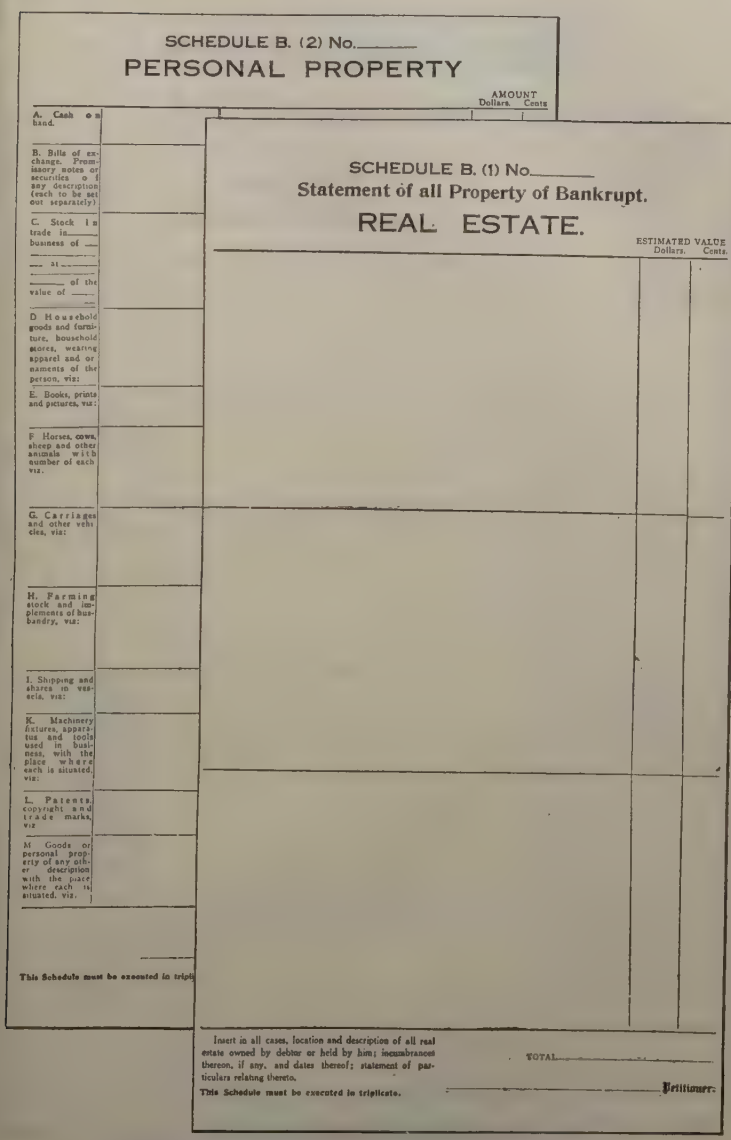
A. D. 19 .

(*Official Character.*)

This oath may be administered by officers authorized to administer oaths in proceedings before Courts of the United States or under the laws of the State where the same are to be taken; and diplomatic or consular officers of the United States in any foreign country.

Petitioner's attorney cannot act as notary.

FIG. 8. Oath to Schedule A in Bankruptcy



SCHEDULE B. (2) No._____

PERSONAL PROPERTY

AMOUNT
Dollars. Cents

A. Cash on hand.

B. Bills of exchange. Promissory notes or securities of any description (each to be set out separately)

C. Stock in trade in business of _____ at _____ of the value of _____

D. Household goods and furniture, household stores, wearing apparel and ornaments of the person, viz:

E. Books, prints and pictures, viz:

F. Horses, cows, sheep and other animals with number of each viz.

G. Carriages and other vehicles, viz:

H. Farming stock and implements of husbandry, viz:

I. Shipping and shares in vessels, viz:

K. Machinery fixtures, apparatus and tools used in business, with the place where each is situated, viz:

L. Patents, copyright and trade marks, viz

M. Goods or personal property of any other description with the place where each is situated, viz.

This Schedule must be executed in triplicate.

SCHEDULE B. (1) No._____

Statement of all Property of Bankrupt.

REAL ESTATE.

ESTIMATED VALUE
Dollars. Cents.

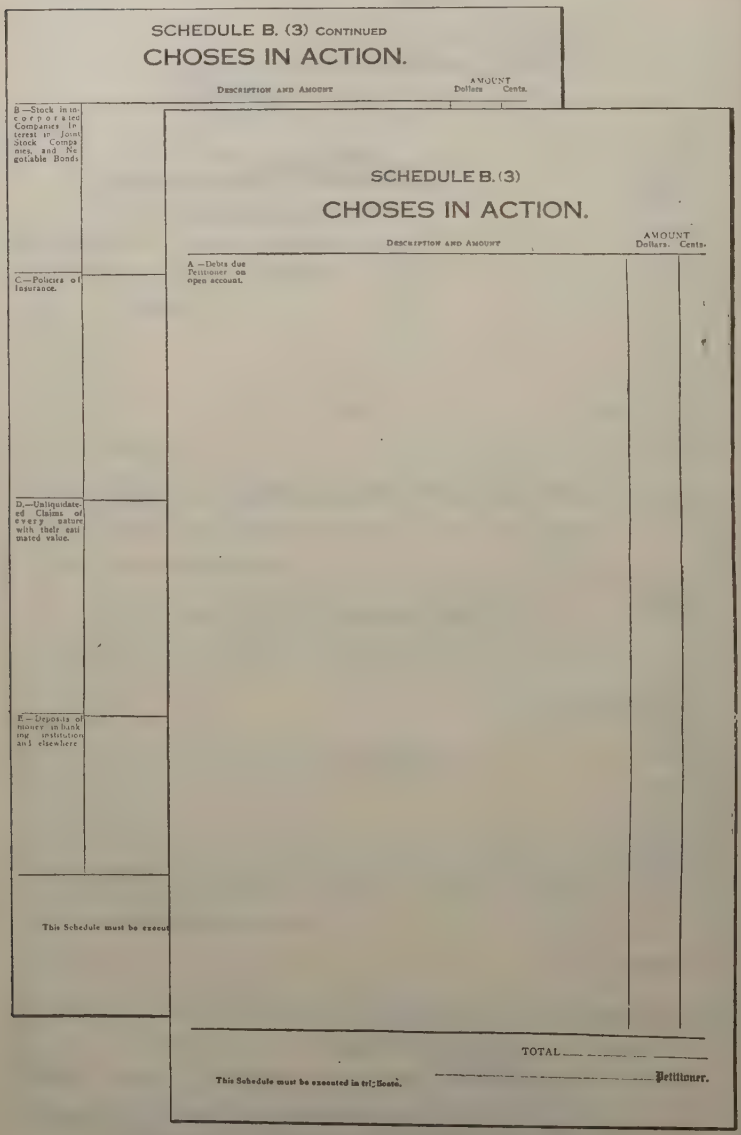
Insert in all cases, location and description of all real estate owned by debtor or held by him; incumbrances thereon, if any, and dates thereof; statement of particulars relating thereto.

This Schedule must be executed in triplicate.

TOTAL

_____ Petitioner.

FIG. 9. Schedules B (1) and B (2) in Bankruptcy



SCHEDULE B. (3) CONTINUED

CHOSES IN ACTION.

DESCRIPTION AND AMOUNT — AMOUNT Dollars Cents.

B.—Stock in incorporated Companies interest in Joint Stock Companies, and Negotiable Bonds.

C.—Policies of Insurance.

D.—Unliquidated Claims of every nature with their estimated value.

E.—Deposits of money in banking institutions and elsewhere

This Schedule must be execut

SCHEDULE B. (3)

CHOSES IN ACTION.

DESCRIPTION AND AMOUNT — AMOUNT Dollars. Cents.

A.—Debts due Petitioner on open account.

TOTAL

This Schedule must be executed in triplicate.

Petitioner.

FIG. 10. Schedule B (3) in Bankruptcy

SCHEDULE B. (4) No._____

Property in Reversion, Remainder or Expectancy, including Property held in Trust for the debtor, or subject to any, Power or Right to Dispose of, or to Charge

N. B.—A particular description of each interest must be entered. If all or any of the Debtor's Property has been conveyed by Deed or Assignment, or otherwise, for the benefit of Creditors, the date of such Deed should be stated, the name and address of the person to whom the property was conveyed, the amount realized from the proceeds thereof, and the disposal of the same, as far as known to the Debtor.

GENERAL INTEREST	PARTICULAR DESCRIPTION	SUPPOSED VALUE OF MY INTEREST. Dollars.	Cents.
Interest in Land.			
Personal Property.			
Property in Money, Stocks, Shares, Bonds, Annuities, etc.			
Rights and Powers, Legacies and Bequests.			
	TOTAL		

PROPERTY HERETOFORE CONVEYED FOR BENEFIT OF CREDITORS		Amount Realized from Proceeds of Property Conveyed. Dollars.	Cents
What portion of Debtor's property has been conveyed by Deed or Assignment, or otherwise for benefit of Creditors; date of such Deed, name and address of party to whom conveyed, amount realized therefrom, and disposal of same, so far as known to the Debtor.			
What sum or sums have been paid to Counsel, and to whom, for service rendered or to be rendered in this Bankruptcy.			
	TOTAL		

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 11. Schedule B (4) in Bankruptcy

SCHEDULE B. (6) No._____

BOOKS, PAPERS, DEEDS AND WRITINGS RELATING TO BANKRUPT'S BUSINESS AND ESTATE.

The following is a True List of all Books, Papers, Deeds and Writings relating to my Trade, Business, Dealings, Estate and Effects, or any part thereof, which at the date of this Petition, are in my possession or under my custody and control, or which are in the Possession or Custody of any Person in Trust for me, or for my Use, Benefit, or Advantage; and also of all others which may have been heretofore, at any time in my Possession, or under my custody or Control, and which are now held by the parties whose names are hereinafter set forth, with the reason for their custody of the same:

Books,		
Deeds,		
Papers, Etc.		

This Schedule must be executed in

SCHEDULE B. (5) No._____

A Particular Statement of the property claimed as exempted from the operation of the Acts of Congress relating to Bankruptcy, giving each item of property and its valuation; and if any portion of it is Real Estate, its location, description and present use.

	VALUATION, Dollars.	Cents.
Military Uniforms, Arms and Equipments.		
Property claimed to be exempted by State laws; its valuation, whether real or personal; its descriptions, and present use; and reference given to the Statute of the State creating the exemption.		
	TOTAL	

_____ Petitioner.

This Schedule must be executed in triplicate.

FIG. 12. Schedule B (5) and B (6) in Bankruptcy

N. B.—The following form of Oath to Schedule B of the Petition by Debtor is prescribed and is to be annexed to the same.

OATH TO SCHEDULE B.

United States of America
District of } ss.

On this day of A. D. 19

before me personally came

the person mentioned in and subscribed to the foregoing Schedule, and who, being by me first duly sworn, did declare the said Schedule to be a statement of all his Estate, both real and personal, in accordance with the Acts of Congress relating to Bankruptcy.

Subscribed and sworn to before me this _____ day of _____ A. D. 19 _____

_____
(*Official Character.*)

This oath may be administered by officers authorized to administer oaths in proceedings before Courts of the United States or under the laws of the State where the same are to be taken; and diplomatic or consular officers of the United States in any foreign country

Petitioner's attorney cannot act as notary

FIG. 13. Oath to Schedule B in Bankruptcy

Summary of Debts and Assets

From the Statements of the Bankrupt in Schedules A and B.

Schedule A	1	(1) Taxes and Debts due United States.	
"	1	(2) Taxes due States, Counties, Districts & Municipalities.	
"	1	(3) Wages.	
"	1	(4) Other Debts preferred by Law.	
"	2	Secured Claims.	
"	3	Unsecured Claims.	
"	4	Notes and Bills which ought to be paid by other parties thereto	
"	5	Accommodation Paper.	
		Schedule A, total	
Schedule B	1	Real Estate.	
"	2-a	Cash on hand	
"	2-b	Bills, Promissory Notes and Securities.	
"	2-c	Stock in Trade.	
"	2-d	Household Goods, &c.	
"	2-e	Books, Prints and Pictures.	
"	2-f	Horses, Cows and other animals.	
"	2-g	Carriages and other Vehicles.	
"	2-h	Farming Stock and Implements.	
"	2-i	Shipping and Shares in Vessels.	
"	2-k	Machinery, Tools, &c.	
"	2-l	Patents, Copyrights and Trade-marks.	
"	2-m	Other Personal Property.	
"	3-a	Debts due on Open Accounts.	
"	3-b	Stocks, Negotiable Bonds, &c.	
"	3-c	Policies of Insurance	
"	3-d	Unliquidated Claims.	
"	3-e	Deposits of Money in banks and elsewhere.	
"	4	Property in Reversion, Remainder, Trust, &c.	
"	5	Property claimed to be exempt.	
"	6	Books, Deeds and Papers.	
		Schedule B, total	

This Schedule must be executed in triplicate.

Petitioner.

FIG. 14. Summary of Debts and Assets

To the Honorable

Judge of the District Court of the United States for the District of

The Petition of

a . *Corporation having its principal office at , in the County of and District and State of , and engaged in the business of

Respectfully Represents:

the said Corporation is incorporated by and under the laws of the State of that it has had its principal office and its principal place of business for the greater portion of six months next immediately preceding the Filing of this Petition at within said judicial district; that it owes debts which it is unable to pay in full; that it is willing to surrender all its Property for the benefit of its Creditors, except such as is exempt by law, and desires to obtain the benefit of the Acts of Congress relating to *Bankruptcy;* and that its Board of Directors has duly authorized such acts on its part and the statement herein made in its behalf.

That the Schedule hereto annexed, marked A, and verified by the oath of your Petitioner's contains a full and true statement of all its debts; and (so far as it is possible to ascertain) the names and places of residence of its Creditors, and such further statements concerning said debts as are required by the provisions of said acts:

That the Schedule hereto annexed marked B, and verified by the oath of your Petitioner's contains an accurate inventory of all its Property, both Real and Personal, and such further statements concerning said Property as are required by the provisions of said acts:

Wherefore your Petitioner Prays, That it may be adjudged by the Court to be a Bankrupt, within the purview of said Acts.

(SEAL) Petitioner.

by

Attorney.

United States of America, District of ss.

the of the

the Corporation and Petitioning Debtor mentioned and described in the foregoing Petition, does hereby make solemn oath that the Statements contained therein are true, according to the best of his knowledge, information and belief; that the reason why this verification is made by deponent and not by the Petitioner herein, is that said Petitioner is a Corporation; and that Deponent is the officer of said Corporation duly authorized by its Board of Directors to execute and verify said Petition on its behalf.

Subscribed, and sworn to before me, this day of A. D. 19 .

* "Moneyed, Business or Commercial."

FIG. 15. Debtor's Petition in Bankruptcy—Corporation

PETITION OF CREDITORS—INVOLUNTARY BANKRUPTCY.—The first petition in involuntary bankruptcy is filed by the creditors. Where there are twelve or more creditors, an involuntary petition may be filed by three or more creditors having provable claims aggregating $500 or more above the security held by them. Where there are less than twelve creditors, one creditor having provable claims amounting to $500 or more, above any security held by him, may file a petition.

For the purpose of determining how many creditors must join in a petition the following are not counted unless they are parties to the petition:

Relatives by blood or marriage within the third degree.
Employees of the alleged bankrupt.

The petition must allege specifically one or more acts of bankruptcy in such detail that the court can act on the petition without going into matters outside of the allegations set forth therein. The form of creditors' petition is substantially as outlined in Fig. 2 (page 962).

The alleged bankrupt, within ten days after the creditors' petition in bankruptcy is filed, must furnish detailed schedules in the same manner as in the case of a voluntary bankruptcy.

EXEMPTIONS OF BANKRUPTS.—The bankruptcy laws provide for the exemptions specified in the statutes of the state in which the bankrupts were domiciled for 6 months immediately preceding adjudication. In *Hanover National Bank* v. *Moyses*, 186 U. S. 181, it was held that bankrupts are allowed the exemptions prescribed by state laws in force at the time of the filing of the petition in bankruptcy. The bankruptcy courts may determine the rights of bankrupts to the exemptions claimed, but are guided by the decisions of the state courts as to the meaning and the construction of such laws.

Reference should always be made to the exemption statutes of the state in which debtors live. In many states certain articles are enumerated such as (1) horses, work animals, vehicles, farming utensils, tools and implements of trade, library and implements of professional men, etc., which are used as a means of gaining a living; (2) food, wearing apparel, household furniture, earnings and wages, life insurance money, pensions, proceeds of exempt properties, etc. In many cases, however, the exemption statutes are subject to exceptions and to varying interpretations.

Creditors' Meetings and Notices

CREDITORS' MEETINGS.—As soon as a petition in bankruptcy is filed with the court all the known creditors are notified to attend a meeting (Fig. 16), at which time the **bankrupt may be examined, the creditors prove their claims, and a trustee is appointed.** In urgent cases the court will immediately appoint a **receiver** pending the meeting of creditors and appointment of a **trustee.**

Notices of meetings and proceedings in bankruptcy are given by the referees unless otherwise ordered by the courts. Creditors are entitled to 10 days' notice by mail of all.

1. Meetings of creditors.
2. Examinations of the bankrupt.
3. Hearings, upon application for the confirmation of compositions.
4. Proposed compromises of controversies.
5. Proposed sales of property.
6. Declarations and times of payment of dividends.

7. Filings of the final accounts of trustees and times and places where they will be examined and passed on.
8. Proposed dismissals of proceedings.

Creditors are entitled to 30 days' notice of all applications for **discharge of bankrupts.**

Subsequent meetings may be held when all the creditors who have claims, agree in writing, or at the call of the court at the request of one fourth of the creditors whose claims were allowed.

IN THE DISTRICT COURT OF THE UNITED STATES, for the ..... District of ..... In the Matter of ..... Bankrupt.

TO THE CREDITORS OF ....., of ....., in the County of ..... and district aforesaid, a Bankrupt:

NOTICE is hereby given, that on the ..... day of ..... A. D. ....., the said ..... was duly adjudicated bankrupt and that the first meeting of his creditors will be held at my office, Room ....., ... in ..... on the ..... day of .... A. D. ....., at ..... o'clock in the (forenoon) at which time the said creditors may attend, prove their claims, appoint a trustee, examine the bankrupt and transact such other business as may properly come before said meeting.

.....
Referee in Bankruptcy

Dated at .....

FIG. 16. Official Notice to Creditors of First Meeting

VOTING AT CREDITORS' MEETINGS.—**Secured creditors** may not vote except for the amount of their claims in excess of the value of the security.

Unsecured creditors may vote. A majority vote in number and amount of claims of all creditors who are present and whose claims have been allowed, may pass on matters submitted to them.

FILING PROOF OF CLAIMS.—All claims of creditors must be filed and proved in a formal manner to the court or referee (Figs. 17 to 20, pages 982 to 985.) Proof must be in writing, signed and sworn to by claimants setting forth details and dates of all items, the consideration therefor, collateral held against them, payments made and maturity dates. All claims must contain a statement to the effect that the sum stated to be due is justly owing.

A statement must be made regarding the **consideration** given for the claim, as for instance: "That the consideration of the said debt is groceries bought by and delivered to said John Doe."

When the proof of claims covers **open accounts** there should be submitted with it a statement of the accounts together with duplicate bills.

Original written instruments should be attached to and made part of the proof of claims where the debts are founded on such instruments. Probably a safer method is to attach photostatic copies and retain the originals. In case of lost or destroyed instruments there should be set forth in the proof of debt, the facts of the indebtedness and the loss or destruction of the instruments.

Secured creditors may prove their debts for the full amount and have their liens foreclosed in the bankruptcy court, or they may exhaust their security and file claims for the balance.

Endorsers, guarantors and sureties may prove, in the name of creditors, any claim upon which they are secondarily liable and which the creditors have failed to prove.

204 | In Bankruptcy—Form No. 21
Proof of Unsecured Debt.

In the District Court of the United States,

for the District of

In the matter of

In Bankruptcy.

Bankrupt

At , in said district of
on the day of , A. D. 192 , came

of , in the county of in said district of
, and made oath, and says that

the person by (or against) whom a petition for adjudication of bankruptcy has been filed, was at and before the filing of said petition, and still is justly and truly indebted to said deponent in the sum of dollars,

that the consideration of said debt is as follows:

that no part of said debt has been paid [except

that no note has been given therefor [except

that there are no set-offs or counter-claims to the same [except

that no judgment has ever been recovered thereon [except

; and that deponent has not nor has any person by his order, or to his knowledge or belief, for his use had or received any manner of security for said debt whatever.

Creditor

Subscribed and sworn to before me this
day of A. D. 192

FIG. 17. Proof of Unsecured Debt

In the District Court of the United States

For the District of

In the matter of

In Bankruptcy.

Bankrupt

At , in the district of
on the day of , A. D. 19 , came
of , in the county of in said district of
and made oath and says that

the person by (or against)
whom a petition for adjudication of bankruptcy has been filed, was at and before the filing of said petition, and still is justly and truly indebted to said deponent in the sum of dollars, that the consideration of said debt is as follows:

that no part of said debt has been paid [except

that there are no set-offs or counterclaims to the same [except

and that the only securities held by this deponent for said debt are the following:

Creditor

Subscribed and sworn to before me this
day of A. D. 19 .

FIG. 18. Proof of Secured Debt

883] In Bankruptcy—Form No. 14
Proof of Debt by Partnership

In the District Court of the United States,

For the District of

In the matter of

In Bankruptcy. No.

Bankrupt

At , in the district of
on the day of , A. D. 192 , before me came

of , in the county of in said district of
and made oath and says that he is one of the firm of
consisting of himself and

of , in the county of and State of
that the said , the person
by whom a petition for adjudication of bankruptcy has been filed, was at and before the filing of said petition, and still is, justly and truly indebted to this deponent's said firm in the sum of dollars.
that the consideration of said debt is as follows

that no part of said debt has been paid [except

that no note has been given therefor [except

that there are no set-offs or counterclaims to the same [except

that no judgment has ever been recovered thereon except

and this deponent has not, nor has his said firm, nor has any person by their order, or to this deponent's knowledge or belief, for their use, had or received any manner of security for said debt whatever.

Subscribed and sworn to before me this
day of A. D. 192

FIG. 19. Proof of Debt Due Partnership

PROOF OF DEBT AND POWER OF ATTORNEY—480
CORPORATION

In the District Court of the United States,
for the District of

In the matter of

Bankrupt } *In Bankruptcy*

At *in the* *District of*
on the *day of* *A. D. 19* *, came*
of *in the County of* *and State of*
*and made oath and says that he is** *of the*
a corporation incorporated by and under the laws of
the State of *and authorized to do business in*
in the County of *and State of* *and that he is duly*
authorized to make this proof, and that the said Bankrupt by or against whom a petition for adjudication of Bankruptcy has been filed, was at and before the filing of said petition, and still is justly and truly indebted to the said corporation in the sum of
dollars, that the consideration of said debt is as follows.

and the same became due on the *day of* *19* *, as per statement of said account hereto annexed and made a part hereof, that no part of said debt has been paid, that there are no set-offs or counterclaims to the same, and upon which indebtedness no note has been received or judgment rendered thereon, and that said corporation has not, nor has any person by its order, or to the knowledge or belief of said deponent for its use, had or received any manner of security for said debt whatever*

Subscribed and sworn to before me this *day of* *A. D. 19*

(L. S.)
(Name of Corporation)

{Notary must affix seal here} *Notary Public*
County.

by
{Corporation seal must be affixed here}

To (*or Representatives*

The undersigned *a corporation duly incorporated*
under the laws of the State of *and duly authorized to do business at*
in the County of *and State of*
does hereby authorize you and each of you or your representative to attend the meeting or meetings of creditors of the bankrupt advertised or directed to be held at a Court of Bankruptcy or at such place and time as may be appointed by the Court for holding such meeting or meetings, or any adjournment or adjournments thereof that may be held and then and there from time to time and as often as there may be occasion, for it and in its name, to vote for or against any proposal or resolution that may be then submitted under the act to establish a uniform system of bankruptcy throughout the United States, approved July 1st, 1898, and in the choice of trustee or trustees of the estate of said bankrupt and for him to accept such appointment of trustees and with like powers to attend and vote at any meeting or meetings of creditors or sitting or sittings of the Court which may be held therein for any of the purposes aforesaid; also to accept any composition proposed by said bankrupt in satisfaction of its debt, and receive payment of dividends, and money due it under any composition or for the declaration of dividend or for any other purpose in its interest whatsoever, and with full powers of substitution and hereby revoke all other powers of attorney by it given herein.

In Witness whereof, *the said*
*has hereunto caused these presents to be signed by its** *and its corporate seal to be affixed the* *day of* *19*

(L. S.)
(Name of Corporation)

Signed, sealed and delivered in the presence of

By
{Corporate seal must be affixed here}

FIG. 20. Proof of Debt Due Corporation, with Power of Attorney

There must be shown in the proofs of debt whether the claimants are individuals, partnerships or corporations.

REPRESENTATIVES OF CREDITORS.—Where creditors cannot attend proceedings in bankruptcy they may be represented by agents. To empower such agents to act for creditors it is necessary to give them **powers of attorney** which may be made part of, or attached to, the proof of claim.

FILING OF CLAIMS.—Claims are lost unless they are proved within one year after the date of adjudication, excepting that, under unusual circumstances where creditors are without fault, they may be permitted to file their claims later.

When proved and accepted by the court, claims are allowed in the meaning of the statute. Whenever possible it is advisable to obtain an acknowledgment from the referee that the claims have been allowed. Creditors should feel free to follow their allowed claims and inquire after their progress.

DEBTS WHICH MAY BE PROVED.—Debts which may be proved against the estate of a bankrupt are:

1. Those which are founded on legal contracts, express or implied.
2. Fixed liabilities, as evidenced by a judgment or an instrument in writing, absolutely owing at the time of the filing of the petition against him, whether then payable or not, with any interest thereon which would have been recoverable at that date or with a rebate of interest upon such as were not then payable and did not bear interest.
3. Court costs assessable against an involuntary bankrupt who was, at the time of the filing of the petition against him, plaintiff in a cause of action which would pass to the trustee and which the trustee declines to prosecute after notice.
4. Debts that are founded upon a claim for taxable costs incurred in good faith by a creditor before the filing of the petition in an action to recover a provable debt.
5. Debts founded upon provable debts reduced to judgments after the filing of the petition and before the consideration of the bankrupt's application for a discharge, less costs incurred and interests accrued after the filing of the petition and up to the time of the entry of such judgments.

Unliquidated claims against the bankrupt may, pursuant to application to the court, be liquidated in such manner as it shall direct, and may thereafter be proved and allowed against his estate.

DEBTS WHICH MAY NOT BE PROVED.—Where there are no present liabilities under contracts at the time proof of debt is made, claims are not provable. Such is the case when rent becomes due at a future time.

DUTIES OF BANKRUPT.—After bankruptcy proceedings have been taken and the court has appointed receivers the bankrupt should:

1. Attend the first meeting of his creditors, if directed by the court or a judge thereof to do so, and the hearing upon his application for a discharge, if filed.
2. Comply with all lawful orders of the court.
3. Examine the correctness of all proofs of claims filed against his estate.
4. Execute to his trustee transfers of all his property in foreign countries.
5. Execute and deliver such papers as shall be ordered by the court.
6. Immediately inform his trustee of any attempt, by his creditors or

other persons, to evade the provisions of this Act coming to his knowledge.

7. In case of any person having to his knowledge proved a false claim against his estate, disclose that fact immediately to his trustee.

8. Prepare, make oath to, and file in court within 10 days, unless further time is granted, after the adjudication, if an involuntary bankrupt, and with the petition if a voluntary bankrupt, a schedule of his property, showing the amount and kind of property, the location thereof, its money value in detail and a list of his creditors, showing their residence if known, if unknown, that fact to be stated, the amounts due each of them, the consideration thereof, the security held by them, if any, and a claim for such exemptions as he may be entitled to, all in triplicate, one copy of each for the clerk, one for the referee, and one for the trustee.

9. When present at the first meeting of his creditors, and at such other times as the court shall order, submit to an examination concerning the conducting of his business, the cause of his bankruptcy, his dealings with his creditors and other persons, the amount, kind, and whereabouts of his property, and, in addition, all matters which may affect the administration and settlement of his estate; but no testimony given by him shall be offered in evidence against him in any criminal proceeding.

Provided, however, that he shall not be required to attend a meeting of his creditors, or at or for an examination at a place more than 150 miles distant from his home or principal place of business, or to examine claims except when presented to him, unless ordered by the court, or a judge thereof, for cause shown, and the bankrupt shall be paid his actual expenses from the estate when examined or required to attend at any place other than the city, town, or village of his residence.

EXAMINATION OF THE BANKRUPT.—From the time the petition is filed the alleged bankrupt is subject to examination by the court. Such examinations are open to creditors and may be held in open court, in chambers, or, as is usually the case, before a referee, whose acts are, of course, for practical purposes, those of the court itself.

Creditors should attend and interest themselves with such examinations either in person or by representatives. These examinations are important, particularly in cases where fraud may have been committed, or where assets may have been concealed, or where books and records may have been destroyed.

Even though the financial interest of creditors may be relatively small, or the amount of money likely to be recovered negligible, creditors should at all times recognize the importance of exercising their rights under this phase of the law relating to the examination of the bankrupt and should unreservedly lend their interest and support to it. Debtors who know that their creditors, who are familiar with their mutual transactions, are going to subject them to severe and close examinations are not as likely to commit frauds or conceal their assets.

REFEREES—APPOINTMENT AND DUTIES.[10]—Courts of bankruptcy shall . . . . appoint referees for a term of two years, and may, in their discretion, remove them because their services are not needed or for other cause. Referees shall (1) declare dividends and prepare and deliver to trustees dividend sheets showing the dividends declared and to whom payable; (2) examine all schedules of property and lists of creditors filed by bankrupts and cause such

[10] Bankruptcy Law, Section 39.

as are incomplete or defective to be remedied; (3) furnish such information concerning the estates in process of administration before them as may be requested by the parties at interest; (4) give notices to creditors as herein provided; (5) make up records embodying the evidence, or the substances thereof, as agreed upon by the parties in all contested matters arising before them, whenever requested to do so by either of the parties thereto, together with their findings therein, and transmit them to the judges; (6) prepare and file schedules of property and lists of creditors required to be filed by the bankrupts, or cause same to be done, when the bankrupts fail, refuse or neglect to do so; (7) safely keep, perfect and transmit to the clerks the records herein required to be kept by them when the cases are concluded; (8) transmit to the clerks such papers as may be on file, as needed in any proceedings; and (9) preserve the evidence taken before them. Referees shall not act in cases in which they are interested; practice as attorneys in any bankruptcy proceedings; or purchase, directly or indirectly, any property of an estate in bankruptcy.

TRUSTEES—APPOINTMENT AND DUTIES.[11]—The creditors of a bankrupt estate shall, at their first meeting after the adjudication or after a vacancy has occurred in the office of trustee, or after an estate has been reopened, or after a composition has been set aside or a discharge revoked, of if there is a vacancy in the office of trustee, appoint one or three trustees of such estate. If the creditors do not appoint a trustee as herein provided, the court shall do so. Trustees shall account for and pay over to the estates under their control all interest received by them upon the property of such estate; collect and reduce to money the property of such estate; deposit moneys in designated depositories; disburse money only by check or draft on the depositories; furnish such information concerning the estates as may be requested by parties in interest; keep regular accounts showing all amounts received and from what sources and all amounts expended and on what accounts; lay before the final meeting of the creditors detailed statement of the administration of the estate; pay dividends within ten days after they are declared by the referees; and set apart the bankrupt's exemptions.

TRUSTEE'S TITLE.[12]—The trustee, upon appointment and qualification, is vested by operation of law with the title of the bankrupt, as of the day he was adjudged a bankrupt, except as to exemptions, to all (1) documents, (2) interests in patents, etc., (3) powers which he might have exercised for his own benefit, (4) property transferred to him in fraud of his creditors, (5) property which prior to the filing of the petition he could by any means have transferred or which might have been levied upon and sold under judicial process against him, and (6) rights of action arising upon contracts, etc.

RECEIVERS—APPOINTMENT AND DUTIES.—Receivers are appointed by the court to receive and preserve bankrupts' estates. Their appointment usually follows in instances where there is immediate danger of waste, neglect or fraud if the bankrupts remain in possession. Their tenure of office is frequently short, as trustees are usually appointed at the first meetings of the creditors.

The debtor, or the creditors, may petition for the appointment of a receiver. The following form (Fig. 21) shows the substance of a petition by creditors for the appointment of a receiver:

[11] Bankruptcy Law, Section 47.
[12] Remington, page 2721.

..... and ..... and .....
....., the petitioning creditors in the involuntary petition in bankruptcy pending herein against ....., the alleged bankrupt above named, move the court for an order appointing a receiver herein, and for a warrant to issue to such receiver, authorizing and directing ..... to seize the property of said alleged bankrupt and to hold the same pending the hearing upon said petition; and this ..... for upon the ground that it is absolutely necessary, for the preservation of the estate, that..... ..... be appointed; that said alleged bankrupt has committed an act of bankruptcy in that heretofore to wit, on the ..... day of ..... A. D. ....., ... did transfer and pay to ..... the sum of ..... Dollars, with the intent, while solvent, to prefer the said ....., ... creditors, over the other creditors of the said .....; and that said alleged bankrupt has neglected and is neglecting, and is about to further so neglect ..... property that it has deteriorated and is hereby deteriorating, and is about to further deteriorate in value, and this is so from the following facts, to wit: That on, to wit, the ..... day of ..... A. D. ....., the said alleged bankrupt ceased operations at ..... factory, and the same is now shut down; that the yards of the said alleged bankrupt are not protected or sheltered, that the buildings are open, and that the machinery and stock in said yards and building are not properly guarded and protected against the weather and trespassers; and that the yards, building, and machinery are in a dilapidated condition.

FIG. 21. Petition for Appointment of Receiver

ADMINISTRATION IN HANDS OF RECEIVER.—The Bankruptcy Act as drawn, was intended to place the administration of the estate in the hands of a trustee selected by the creditors. The appointment of a receiver was regarded as something quite incidental (Fig. 22). In point of fact, in actual operation the administration of the estate has come largely, if not predominantly, into the hands of a receiver appointed shortly after the filing of a voluntary or involuntary petition.

Judge Learned Hand says: "In the City of New York practically all the administration takes place in the hands of the receiver." One of the lawyers especially familiar with this branch of the law says that the **interim** business is the whole thing in large cases. Another lawyer, equally familiar with the practice, said: "My opinion is that the best part of the administration of any estate is conducted by the receiver and not by the trustee." In many instances the receiver appointed by the court is continued as trustee.

A large proportion of bankruptcies, estimated by a number of the witnesses as at least 75%, are what may be called "small bankruptcies" where the assets are less than five thousand dollars and generally not in excess of two or three thousand dollars. Dun's Review of Business Conditions for 1922 shows that fully 90% in number of the commercial failures in the United States are those of manufacturers and traders. These debtors ordinarily have on hand a stock of merchandise, either finished or in course of manufacture, frequently of a reasonable character, which it is necessary to protect from spoilation by the immediate appointment of some person to care for it. Hence the necessity generally of the prompt appointment of a receiver when a petition is filed.

The bankruptcy law authorized the court to "appoint receivers or the marshals upon application of parties in interest, in case the court shall find it absolutely necessary, for the preservation of estates to take charge of the property of bankrupts after the filing of a petition and until it is dismissed or the trustee is qualified." [Section 2 (3).] But the limitation as to absolute necessity is liberally construed and it may be said to be the all but universal practice to appoint a receiver.

There is no provision in the statute for the appointment of a custodian other than the implication arising from the provision for the payment of fees "when the receiver or marshal acts as a mere custodian." (Section 48 d.)

The courts sometimes appoint persons who are termed custodians but they are really receivers appointed under the authority above cited, though their duties are limited by the order of appointment. The marshal may be appointed to take charge of the property.

At a Stated Term of the United States District Court for the District of ....., held at the Court Rooms thereof,

.....on the.....day of....., 192..

Present—Hon....., Judge.

In the Matter of Alleged Bankrupt.	*In Bankruptcy* *No.*

WHEREAS, an involuntary petition in bankruptcy has this day been duly filed in the office of the Clerk of this Court, against the above-named alleged bankrupt , and it appearing that a subpoena has duly been issued against said alleged bankrupt , as required by law, and upon reading and filing the annexed petition of..... and a bond of the said petitioning creditor having been duly filed and approved; and it appearing that the granting of this order is necessary to preserve the assets of the above-named bankrupt,

Now, it is, on motion of ..... attorneys for said petitioning creditor,

ORDERED, that.....be and...he hereby is appointed temporary receiver of all goods, wares and merchandise, accounts, account books, chattels, choses in action, real estate and all other property of whatsoever nature and wheresoever located, belonging to or being the property of or in the possession of the above-named alleged bankrupt ; and it is further

ORDERED, that said receiver give a sufficient bond to the People of the United States in the sum of.....($.....) dollars, conditioned for the faithful performance of his duties as such receiver; and it is further

ORDERED, that said receiver be and he is hereby empowered forthwith to take possession of all property, assets and effects of whatsoever nature and wheresoever located, now owned by or in the possession of said alleged bankrupt , and of all and any property wheresoever located and of whatsoever nature, being the property of said alleged bankrupt , and in the possession of any agent, servant, officer or representative of said alleged bankrupt , as well as any and all real property belonging to said alleged bankrupt ; and said receiver is authorized to do all and any such acts and take all and any such proceedings as may enable him forthwith to obtain possession of all and any such property, and to keep and preserve the same until further order of this Court; and it is further

ORDERED, that all persons, firms, and corporations, including said alleged bankrupt , and all attorneys, agents, officers and servants of said alleged bankrupt , forthwith deliver to said receiver all property, assets and effects of whatsoever nature and wheresoever located, including merchandise, accounts, notes and bills receivable, drafts, checks, moneys, securities, and all other choses in action, account books, records, chattels, lands and buildings, life and fire and all other insurance policies, in the possession of them, or any of them, and owned by the alleged bankrupt ; and said alleged bankrupt ordered forthwith to deliver to said receiver all and any of such property now in the possession of the said alleged bankrupt ; and it is further

ORDERED, that all persons, firms and corporations, including all creditors of said alleged ankrupt ; and the representatives, agents, attorneys and servants of all such creditors, nd all sheriffs, marshals and other officers, and their deputies, representatives and servants, re hereby jointly and severally enjoined, restrained and stayed from removing, transferng, disposing of, or attempting in any way to remove, transfer or dispose of, or in any ay interfere with any property, assets or effects in the possession of the said alleged bankupt , or owned by said alleged bankrupt and in the possession of any officers, agents, ttorneys or representatives of said alleged bankrupt ; and all said persons are further njoined, stayed and restrained from executing or issuing or causing the execution or issunce or the suing out of any Court, of any writ, process, summons, attachment, replevin, xecution, or any other proceeding for the purpose of impounding or taking possession of r interference with, any property owned by or in the possession of said alleged bankupt or owned by said alleged bankrupt and in the possession of any agents, servants r attorneys of said alleged bankrupt ; and each and all of said persons, firms or corporaions having process against the said alleged bankrupt are hereby jointly and severally estrained, stayed and enjoined from taking any steps, measures or proceedings or doing ny act or thing in any action wherein the said alleged bankrupt may be either plaintiff, efendant, petitioner or respondent, and from causing, procuring, suffering or permitting he same to be done; and it is further

ORDERED, that all persons, firms and corporations be and they hereby are enjoined from isturbing or interfering with gas, telephone service, heat, electrical service, water supply r any other utility of like kind, furnished to said alleged bankrupt , and are hereby njoined from cutting off or disconnecting the furnishing of any such utilities to said lleged bankrupt except upon three days' notice in writing to said receiver; and all persons, rms or corporations owning real or personal property, including any lands or buildings n which is located any property of said alleged bankrupt , are enjoined, pending the rther order of this Court, from removing or interfering with any property of said alleged ankrupt.

FIG. 22. Order Appointing Receiver in Bankruptcy

DEBTS, PRIORITY AND DISCHARGE.—In bankruptcy proceedings, ebts due creditors take rank as follows:

1st. Taxes and debts due the United States.
2nd. Actual and necessary costs of preserving the estate.
3rd. Filing fees and reasonable expenses paid by creditors in recovering to the estate property transferred or concealed by the bankrupt.
4th. Costs of administering the estate, including attorneys' fees.
5th. Wages of workmen, clerks, salesmen, servants, earned within 3 months and not exceeding $300 for each claimant.
6th. Debts given priority by the laws of the various states.
7th. General creditors.

When a creditor has security for his debt, the security must be surrendered r sold before the principal debt can be realized upon. A similar doctrine has een adopted in some states in connection with their insolvency laws (16 Mass. 08; 9 M.A.L. 387). In many states, however, this principle marks a disnction between the Bankruptcy Law and the insolvency laws.

A discharge in bankruptcy releases a bankrupt from all of his provable debts, xcept such as are:

1. Due as a tax levied by the United States, the state, county, district, or municipality in which he resides.
2. Liabilities for obtaining property by false pretences or false representations, or for wilful and malicious injuries to the person or property of another or for alimony due or to become due, or for maintenance or support of wife or child, or for seduction of an un-

married female, or for breach of promise of marriage accompanied by seduction, or for criminal conversation.

3. Have not been duly scheduled in time for proof and allowance, with the name of the creditor, if known to the bankrupt, unless such creditor had notice or actual knowledge of the proceedings in bankruptcy.
4. Were created by his fraud, embezzlement, misappropriation, or defalcation while acting as an officer or in any fiduciary capacity.

Section 68 of the Bankruptcy Act provides that in case of **mutual debts** or credits between the estate of a bankrupt and a creditor, the account shall be stated and one debt shall be set off against the other and the balance only shall be allowed or paid. But a set-off or **counterclaim** shall not be allowed in favor of any debtor of the bankrupt which, (1) is not provable against the estate, or (2) was purchased by or transferred to him after the filing of the petition, or within 4 months before such filing, with a view to such use and with knowledge or notice that such bankrupt was insolvent, or had committed an act of bankruptcy.

Claims may be contested by objection of other creditors at the time of filing. Otherwise the claim as proven will usually be allowed by the referee.

COLLECTION AND DISTRIBUTION OF ASSETS.—The courts of bankruptcy are authorized to cause the estates of bankrupts to be collected and reduced to money and distributed, and to determine controversies in relation thereto, except as provided in the law.

Dividends.—Dividends are paid in equal proportion on all allowed claims except those which are secured or have priority. The **first dividend** must be paid within 30 days after the adjudication where (1) the money of the bankrupt's estate, in excess of the amount necessary to pay priority and lien claims, is equal to or more than 5% of the amount of the allowed claims; but (2) not more than 50% of the funds may be paid out on the first dividend. **Subsequent dividends** are declared whenever the amounts to be distributed shall equal 10% or more of the allowed claims. The judge of the bankruptcy court may order that dividends be declared oftener and in smaller proportions. **Final dividends** cannot be declared until at least three months after the first dividends have been declared.

CREDITORS' RIGHTS UNDER SUBSEQUENT CLAIMS.—Generally speaking creditors rights to dividends are not affected by proof and allowance of their own or other claims subsequent to the date of a dividend. Creditors who have received dividends or in whose favor dividends have been declared are not affected by allowance of claims subsequent to the date of payment or declaration of such dividends. Creditors whose claims are allowed after dividends have been declared, are to be paid dividends in the same ratio as those already received by the other creditors, if the estate equals that much before other creditors are paid any further dividends.

COMPOSITIONS IN BANKRUPTCY.—A composition is an agreement between a debtor and his creditors by which the creditors consent to accept in discharge of their claims a lesser sum than the amount due.

A composition in bankruptcy may be affected only **on confirmation by the court.** The debtor may move to have the bankruptcy proceedings against him dismissed when he has delivered to the court the amount agreed upon under an accepted composition for distribution to his creditors.

PROCEDURE IN COMPOSITION.—After the petition has been filed, the debtor may offer to settle with his creditors at a certain per cent of their claims. If such offer is accepted in writing by a majority in number of all creditors whose claims have been allowed and this number represents a majority in amount of allowed claims, the offer is submitted to the court for confirmation. Before the application for the confirmation of the composition offer may be filed in the court, the consideration to be paid by the bankrupt to his creditors and the money necessary to pay all debts which have priority and the cost of the proceedings, must be deposited in a place designated by and subject to the order of the judge. The offer will not be considered by the court until the bankrupt has been examined in open court or at a meeting of his creditors, and has filed in court a schedule of his property and a list of his creditors. The judge will confirm the composition if satisfied that, (1) it is for the best interests of the creditors; (2) the bankrupt has not been guilty of any of the acts or failed to perform any of the duties which would bar his discharge; and (3) the offer and its acceptance are in good faith. Upon the confirmation of a composition, the creditors are paid in accordance with its terms and the case is dismissed.

It is made an offense to extort or attempt to extort any money or property from any person as a consideration for acting or forbearing to act in bankruptcy proceedings.

Every composition is in its spirit if not in its terms an agreement between the creditors themselves as well as between them and the debtor, that each shall receive the sum or security which the agreement stipulates to be paid or given and nothing more, and that upon this consideration the debtor shall be discharged. Every agreement made by one creditor for some advantage to himself over other creditors who unite with him in a composition of their debts is fraudulent and void.

The referee on the application for confirmation files a certificate: "That the bankrupt has in all things conformed with the requirements of the act and done nothing prohibited thereby and that he is entitled to his discharge or confirmation," and also his certificate in addition, "that he does or does not regard the composition for the best interests of the creditors and that the offer and acceptances are in good faith and have not been made or procured by any hidden means."

The act directs that upon the confirmation of the composition the consideration shall be distributed as the judge shall direct. It is the practice to distribute the consideration not merely to the creditors whose debts have been proven but to all persons who appear to be creditors upon the schedules.

CONTROL RETAINED BY COURT.—The court retains control of the bankrupt's estate until the consideration under the composition has been distributed. Section 12 E of the statute reads: "Upon the confirmation of a composition the consideration shall be distributed as the judge shall direct, and the case dismissed." From these words, it is evident that the hand of the court is not removed until the terms of the composition have been fully carried out.

When creditors have once accepted a composition which is confirmed, they cannot thereafter withdraw their acceptance, except on the ground of fraud. At any time within 6 months after a composition has been confirmed, the court may set aside the composition on application of parties interested upon proof of fraud in procuring the composition. When a composition is set aside or is not confirmed the bankrupt's estate is administered in bankruptcy in accordance with the provisions of the statute.

DISCHARGE OF BANKRUPT.—The **bankrupt's right of discharge** is statutory. It may be denied, however, if, for instance, he has failed to keep proper books from which his condition might be ascertained, or has destroyed or concealed his books. It must appear that there has been an **intent to conceal** from creditors the true financial condition. Mere failure to keep books, or bad bookkeeping, might not be sufficient to establish such an intent. Mutilation or destruction of essential records, such as receipts and vouchers, probably would be sufficient.

The court may also **revoke a discharge** if the bankrupt has:

1. Committed an offense punishable by imprisonment.
2. Destroyed, concealed, or failed to keep books of account or records, with intent to conceal his financial condition.
3. Obtained property on credit from any person upon a materially false statement in writing made to such person for the specific purpose of obtaining such property on credit.
4. At any time, subsequent to the first day of the first 4 months immediately preceding the filing of the petition, transferred, removed, destroyed, or concealed any of his property with intent to hinder, delay, or defraud his creditors.
5. In voluntary proceedings been granted a discharge in bankruptcy within 6 years.
6. In the course of proceedings in bankruptcy refused to obey any lawful order of or to answer any material question approved by the court.

A petition and an order for the discharge of a bankrupt are substantially as shown in Figs. 23 and 24.

....*K. G. Namer*...., of ....*Bontown*...., in the County of ....*Independence*.... and State of ....*New York*...., in said district, respectfully represents that on the ....*first*.... day of ....*February, 19—*.... he was duly adjudicated a bankrupt under the acts of Congress relating to bankruptcy; that he has duly surrendered all his property and rights of property and has now fully complied with all the requirements of said acts and of the orders of the court touching his bankruptcy.

WHEREFORE, ...*he*.... prays that ....*he*.... may be decreed by the court to have a full discharge from all debts provable against his estate under said bankrupt acts, except such debts as are excepted by law from such discharge.

Dated this ....*25th*.... day of ....*February*.... A. D. ....*19—*....

....*K. G. Namer*....

Bankrupt

FIG. 23. Petition for Discharge of Bankrupt

IN THE DISTRICT COURT OF THE UNITED STATES, for the ....*Western*.... District of ....*New York*....

WHEREAS, ...*K. G. Namer*...., of ....*Bontown*...., in said district, has been duly adjudged a bankrupt, under the acts of Congress relating to bankruptcy, and appears to have conformed to all the requirements of law in that behalf, it is therefore ordered by this court that said ....*K. G. Namer*.... be discharged from all debts and claims which are made provable by said acts against ....*his*.... estate, and which existed on the ....*tenth* .... day of ....*December*.... A. D. ....*19—*.... on which day the petition for adjudication was filed by ....*him*....; excepting such debts as are by law excepted from the operation of a discharge in bankruptcy.

WITNESS THE HONORABLE ....*Thomas Maillam*...., Judge of said District Court and the seal thereof, this ....*25th*.... day of ....*February*.... A. D. ....*19—*....

.....

(Seal of the Court) Clerk

FIG. 24. Order for Discharge of Bankrupt

ACCOUNTING.—The bankrupt does not have to keep any special books. After preparing the schedule to be filed with the court, his only functions of an accounting nature are, perhaps, to furnish the court with the information that may be requested.

EXPENSES OF ADMINSTRATION.—The **expenses of administration** of a bankrupt's estate are paid out of the assets of the estate and constitute a preferred claim. Actual and necessary expenses are allowed by the court to whom they must be reported in detail and under oath.

FEES AND COMPENSATION OF OFFICERS.—**Referees** receive as compensation the following:

$15 deposited with the clerk when petition is filed.
25 cents for each proof of claim filed, which is paid from the assets of the estate.
1% of all money paid to creditors.
½ of 1% of all money paid to creditors in case of a composition settlement.

Trustees receive $5 deposited with the clerk when the petition is filed and the following fees:

Not to exceed 6%	on the first $500	paid to creditors including lien holders.
" " " 4%	from $500 to $1,500	" " " " " "
" " " 2%	from $1,500 to $10,000	" " " " " "
" " " 1%	on excess of $10,000	" " " " " "

Or in event of a composition settlement, ½ of 1% on amounts paid to creditors.

Receivers or marshals when acting as mere custodians and not carrying on business:

Not to exceed 2% on the first $1,000 or less paid to creditors.
" " " ½ of 1% on excess of $1,000 " " "

Clerks receive $10 filing fee.

Offenses and Penalties in Bankruptcy

PUNISHABLE OFFENSES.—A person may be punished by imprisonment, for a period not exceeding 2 years, upon conviction of having knowingly and fraudulently committed one or more of the following offenses:

1. Concealed from his trustee, while a bankrupt or after his discharge, any property belonging to his estate in bankruptcy.
2. Made a false oath or account in relation to any proceeding in bankruptcy.
3. Presented under oath a false claim or proof against the estate of a bankrupt, or used any such claim in composition personally or by agent, proxy or attorney or as an agent, proxy or attorney.
4. Received from a bankrupt, after a petition was filed, any material amount of property with the intent to defeat the Bankruptcy Act.
5. Extorted or attempted to extort money or property from any person as consideration for acting or forbearing to act in bankruptcy proceedings.

Any person may be fined and imprisoned for **secreting or destroying any documents or records** involved in a bankruptcy proceeding. Prosecution for such offense must be made on indictment which must be brought within one year after the offense was committed.

The Trustee.—A trustee may be removed and punished by imprisonment for a period not exceeding 5 years for having knowingly and fraudulently appropriated to his own use, embezzled, spent or transferred any property belonging to

a bankrupt estate which came into his charge as trustee, or secreted or destroyed any document belong to such bankrupt estate.

The Referee.—A referee may be punished by forfeiture of office and a fine not exceeding $500 upon conviction of having committed one of the following offenses:

1. Acted in a case in which he is personally, directly or indirectly, interested.
2. Refused to permit a reasonable and lawful inspection of the accounts and records of the bankrupt estate.
3. Pledged, directly or indirectly, property of a bankrupt estate in which he is referee.

The Bankrupt.—An involuntary bankrupt is subject to punishment for contempt of court for a failure to file his schedules within 10 days, as required by the Bankruptcy Act and by the order of adjudication. (*In re Schulman*, 164 Fed. 440.)

Reorganizations

DEFINITION OF REORGANIZATION.—The Revenue Act of 1924 defines the term **reorganization** as follows:

1. A **merger or consolidation,** including the acquisition by one corporation of at least a majority of the voting stock and at least a majority of the total number of shares of all other classes of stock of another corporation, or substantially all the properties of another corporation.
2. A **transfer by a corporation** of all or a part of its assets to another corporation, if immediately after the transfer the transferor or its stockholders, both, are in control of the corporation to which the assets are transferred.
3. A **recapitalization.**
4. A **mere change in identity, form, or place of organization,** however effected.

REORGANIZATIONS AFTER FINANCIAL DIFFICULTIES.—Stockholders and creditors generally fare better under some form of reorganization in which they still **retain an equity** in their original investment, or in which their claims are recognized, even though reduced, than by sacrificing the assets of their corporations at forced sale.

Railroads and public utility corporations often have valuable franchises which must be operated to be retained and which may be lost by non-use while industrial corporations frequently have good will of considerable value. The plants and equipment of such companies may be of great value when used for the purposes for which they were designed, but at forced sale would probably realize but little for any other purpose. In addition, such corporations may have operating organizations which have taken years to develop. All of these may be conserved by reorganization.

UNDERLYING CAUSES OF FINANCIAL EMBARRASSMENT.—The favorite excuse of corporate officials for financial embarrassment or insolvency of their corporation is lack of working capital. This superficial and general statement is of little value as a basis to undertake a reorganization, as it is not specific enough. Generally, financial difficulties are due to a combination of causes, some of which are, unprofitable expansion, sudden cessation of sales, destructive competition and the payment of capital charges in excess of earnings. Detailed investigation is necessary to determine how much each cause contributed to the difficulty. The outstanding cause is **poor management.**

This is readily proven by consideration of the vast number of enterprises which have been built up from small beginnings, financed exclusively by undrawn earnings, and which have been in constant competition with older and richer concerns. Capital in itself is almost a minor factor in business success. Management in itself is a factor which outweighs all other factors combined.

CONFLICT OF INTERESTS IN REORGANIZATIONS.—In most financial reorganizations the interests of creditors and stockholders are in conflict in that one or the other, or both, usually must sacrifice part of their claims or equities to consummate the reorganizations.

These **interests** may be grouped as follows:

1. Creditors, including bondholders.
2. Stockholders.
3. Bankers who propose to underwrite the reorganization plan.

In complicated reorganizations these groups will be subdivided into as many classes of creditors and stockholders as the circumstances and financial structure of the concerns may demand.

Creditors.—The creditors may be broadly classified as current creditors and bondholders. Among the **current creditors** there may be some who are preferred and must be paid in full. Federal and state taxes as well as wages of employees are among these. Practically all reorganizations must provide sufficient cash to liquidate such claims. The larger ordinary commercial creditors may be induced to compromise their claims by taking part payment in cash, long-term notes and securities of the reorganized corporation.

Bondholders.—There may be a number of bond issues which have **claims in conflict** with one another. The underlying issues which are well protected are in better position to enforce their rights than the junior issues, which may be called on to make greater relative sacrifices of their interests to effect the reorganizations. In many railroad reorganizations prior lien bond issues are not disturbed and are not even represented.

Stockholders.—The interests of **preferred and common stockholders** are governed by the nature of their securities. If the preferred stock is preferred as to assets in dissolution, the holders are ahead of the common stock issues in reorganizations and will be called on to sacrifice less on their stock than the common stockholders. If a reorganization involves **assessment on the stockholders,** the assessment on such preferred stockholders is generally less than on the common stockholders.

Bankers.—There may be one or more banking houses who are seeking to handle a reorganization. Such banking houses are likely to be in touch with the different classes of bondholders and advise them. This is particularly the case where a banking house brings out a bond issue of a corporation which subsequently defaults, and represents the bondholders in the reorganization, in order to protect them as far as possible.

BANKERS SHOULD BE CONSULTED.—The active assistance of good banking houses is essential to a successful reorganization for several reasons.

1. They generally are called upon to furnish temporary loans.
2. They are often expected to underwrite the reorganization.
3. They have experience in reorganizations.
4. As outsiders they are in a better position to view the situation impartially than those who have conflicting interests.

COMPROMISE OF CONFLICTING INTERESTS.—In most reorganizations there is a complex **struggle between the various groups** or interests. During the period of negotiations there may be arrangement between certain groups and differences between others. To consummate the plan of reorganization it is necessary to carry on negotiations between these interests and compromise here and there. As reorganizations are the result of agreement, it is necessary to obtain the assent of a large proportion of the holders of each class of securities. Provision must sometimes be made to pay creditors who do not agree to the reorganization. If their number and the total amount of their claims is large, it may prevent the reorganizers from carrying out their plans, in which case it may be necessary to liquidate.

BUYING IN PROPERTY AT FORCED SALE.—When a reorganization cannot be accomplished by agreement, some of the larger security holders may raise enough money to buy in the assets at foreclosure sale and organize a new company. This new company has no legal relation with the old one and although often referred to loosely as a reorganization, is strictly a dissolution of the old company and the creation of a new one. Such a procedure is sometimes resorted to fraudulently for the purpose of forcing out minority stockholders.

TYPES OF REORGANIZATIONS.—Reorganizations are divided into **three classes:**

1. Reorganizations **caused by insolvency,** generally induced by the enforcement of the rights of creditors through the foreclosure of mortgages. Such reorganizations involve the formation of new corporations to acquire the property of the insolvent companies.

2. Reorganizations of capitalization **because of financial difficulties,** which, however, do not involve the formation of new corporations.

3. The reconstruction of the capitalization of corporations **for some other reason** than that of insolvency, or to correct defects of financial structure. Generally such recapitalizations are necessary for internal reasons.

Reorganizations may also be classified as **voluntary or negotiated reorganizations,** which are undertaken without the intervention of court procedure, and **litigated reorganizations,** which are undertaken through the intervention of the courts. Voluntary reorganizations may often be consummated without loss or sacrifice on the part of the creditors, and frequently require only an adjustment of the stock ownership of the shareholders. Negotiated reorganizations may be undertaken through creditors' committees and may involve some sacrifice of the claims of creditors, or the acceptance of securities of the reorganized company in payment of a part of their claims. Litigated reorganizations may be brought about through receiverships in equity or by bankruptcy proceedings.

Reorganizations by agreement are of two kinds. The first requires the readjustment of the rights of stockholders with the co-operation of bondholders and other creditors, without the necessity of disturbing the legal existence of the concerns. Reorganization of this kind saves the cost of receiverships. However, security holders can only be persuaded to sacrifice a part of their interest where they can be shown that the sacrifice is necessary and if it is not made voluntarily by them, their companies will be forced into insolvency, resulting in a greater loss to them.

Where the bonded indebtedness is large and the interest charges too great to be carried by a company, the bondholders may be induced to forego their claim for definite interest for a contingent income from income bonds or

dividends from stock. This was done in 1912 by the Hudson & Manhattan Railway Co., which did not earn enough to pay its interest charges on $67,000,000 mortgage bonds. The bondholders were induced to accept in place of one-half of their holdings an equal amount of income bonds, the interest on which, for a number of years, was non-cumulative.

The second method of reorganization by agreement involves the **voluntary sale of all the property** of the old corporation to a new one in return for its stocks and bonds.

LITIGATED REORGANIZATION.—Where a corporation is insolvent and its property sold by legal process to pay off its bondholders and creditors, the **corporate entity** does not pass to the purchaser, although such purchaser may be a committee representing certain of the bondholders, creditors or stockholders of the corporation. The old company may continue its legal existence or may be dissolved by appropriate formalities prescribed by the statutes of the state where the company was incorporated. The purchaser of the plant or business may operate the property free from all claims or liabilities of the old company. The properties so purchased become a part of the assets of the new company formed to operate them.

PROTECTIVE COMMITTEES.—As soon as a corporation is considered to be in financial difficulties the various creditors, bondholders and stockholders appoint committees to represent their interests. One committee may represent the bondholders, another the preferred stock, another the common stock, and another the general creditors. Sometimes in the larger railroad companies there are various committees representing each of the different bond and stock issues.

Such committees are usually **self-appointed** and really consist of groups of individuals who have determined among themselves that it is necessary for them to obtain co-operation from other creditors, bondholders or stockholders in the same position, to join with them to protect their interests.

The members of such committees should be carefully chosen. Unless they are in good standing, or are associated with firms or banking houses in good standing, the security holders may be skeptical as to permitting them to represent their interests.

DEPOSIT AGREEMENTS.—A part of the function of reorganization managers is to have the deposit agreements drawn up by their attorneys. While security holders are not always required to sign such agreements, the procedure is usually arranged so that they **automatically become parties** to the reorganization agreements upon depositing their holdings and accepting the certificates of deposit issued by the depository. The **certificates of deposit** represent the securities deposited, and where the securities are listed on the stock exchanges, these certificates are also generally admitted to trading on those exchanges.

In the preparation of deposit agreements great care is required in order to give the committees sufficient power to cover every emergency which they are likely to meet. As there are as many parties to such agreements as there are security holders, there is little or no opportunity to correct mistakes after the agreements are once formulated and accepted.

Most bond issues are governed by a clause in the mortgage or indenture, providing that in case of default a certain proportion may combine in order to act in any proceeding. The committee managers generally try to get control of enough bonds deposited under the terms of the depository agreement in order to have their plans adopted and prevent action by a rival committee.

PROVISIONS IN AGREEMENTS.—The agreements creating protective committees should provide:

1. That such committees shall have power to add to their members, to accept resignations and fill vacancies.
2. Committees should be authorized to act and bind all by a majority vote.
3. Members should be eligible to vote by proxy and provision should be made to protect the committees and depositories against mistakes and errors made in good faith.
4. Committees should be authorized to employ accountants, engineers, attorneys and other experts, and arrange for their compensation and such other expenses as are necessary, and pledge the depositors' securities as collateral for their payment.
5. Provision should be made for the payment of the committees' compensation and expenses which shall be binding upon the depositors. Generally the agreements set forth maximum limits of the committees' compensation and expenses, and in many cases, the members agree to serve without compensation.
6. The agreements usually give the committees power to adopt a plan of reorganization of their own or one prepared by someone else. However, it is a common provision to require that any plan or agreement of reorganization shall be left with the depository subject to examination by all the depositors and that notice of the filing of the plan should be published at stated intervals. In such cases, depositors may withdraw their securities within a given time, if the reorganization plan is unsatisfactory to them, upon payment of their pro rata share of the expenses to date.
7. It is rarely wise to have the same committee represent different interests, because when such questions arise in reorganizations as to the equitable adjustment of differences in various classes of securities, a committee representing conflicting interests cannot properly represent these different interests.

REORGANIZATION COMMITTEES.—After the several protective committees have been formed they generally enter into negotiations with one another and the receiver, if one has been appointed, with a view to arranging the best possible terms for the interests they represent. To bring about a general agreement of the conflicting interests of the various committees requires an extended series of conferences, negotiations and compromises. Unless there is some influential person or banker, or sometimes the receiver, who can assume the task of reconciling the various interests and bring them together to accept a workable plan of reorganization, recourse must be had to some other method. Generally this is accomplished by selecting one, two, or three members from each protective committee to serve on the **reorganization committee.**

The **functions** of reorganization committees are threefold:

1. Investigation to determine the cause of the financial difficulty.
2. Formulation of a plan to overcome the difficulty.
3. Reconciliation of the various interests so that a workable plan can be accepted and carried into execution.

Membership on the reorganization committee of a large concern calls for considerable ability in corporate finance. The detailed work is usually carried out by a secretary or by counsel.

PROVIDING CASH DURING REORGANIZATION.—Frequently committees on reorganization require considerable sums of money while plans are being formulated. This money may be provided in several ways. It is usually furnished by **assessment** upon the holders of securities. The assessment is levied on the stockholders and sometimes bondholders who are interested in

saving their equity in their securities so that they may participate in the reorganization. Usually it is customary to arrange in advance with a firm of bankers to **underwrite the cash requirements.** This is generally coupled with an agreement which provides that they will purchase such securities, offered to the old security holders, as are not taken by them. An announcement of such an agreement seems to have the effect of practically insuring participation of the greater part of the security holders. The underwriters charge a commission for undertaking this obligation which is virtually equivalent to payment of premiums for insurance. If all the security holders pay their assessments, no advances may be required from the underwriters. On the other hand, if only part of the security holders pay their assessments, the underwriters furnish the remainder of the cash and purchase the securities which would have gone to the assessed security holders had they assented to the plan. Committees frequently borrow money to pay maturing coupons on bonded debt. This is only done when the value of the pledged property is believed to be in excess of the bonded debt.

CONFIRMATION OF PLANS OF REORGANIZATION.—The action of a reorganization committee in **declaring the plan operative** does not necessarily mean that the plan has been executed. It simply means that the depositors are bound to the plan and that the committee has determined to make every effort to carry it into execution. Even after the plan is operative it may be modified or abandoned. It may take from one to three years to carry through a complete reorganization.

TYPICAL PLANS AND AGREEMENTS OF REORGANIZATION.—A Plan and Agreement of Reorganization consists of **two parts**—the plan and the agreement. On the first page of the **Plan** there are as a rule the names of the members of the joint reorganization committee and the secretaries of the various committees which have joined to form the reorganization committee. On the second page there is an introductory statement beginning with a presentation of the causes which led to the insolvency, the investigations made by the committee and a summary of the results that have been arrived at. Next follows the plan itself. There appears first a statement of the present outstanding securities. That is followed by a statement of the cash requirements and a description of the securities and a statement of the proposed distribution of the new securities among the old security holders. Generally a table is provided which shows at a glance how each class of security holders will fare. Then follows a statement of the terms and conditions of the cash payment to be made by assessment of the security holders. Then is shown the reduction of capitalization and the reduction of fixed charges to be accomplished by the new organization and what provision is made for the unsecured creditors.

As distinguished from the Plan, which contains the financial details of the reorganization and such information regarding the means for executing it as should be communicated to the security holders, the **Agreement** is a fuller statement of the powers of the reorganization committee, the rights of the participants in the Plan and the machinery for carrying the Plan into execution.

OPPOSITION COMMITTEES.—The various protective committees may continue to negotiate with one another but they generally follow the lead and advice of their representatives on the reorganization committee. Sometimes certain large security holders who are not represented on the reorganization committee may undertake to form an opposition committee. If this committee is successful in obtaining a sufficient number of proxies from other security holders, there may be a merger of the two committees as it is essential for the

success of every reorganization that there be agreement among the various groups of security holders.

An effort to secure an inordinately high price for the property is one of the favorite devices of those who seek to interfere with reorganizations. Opposition to reorganizations may come from security holders who are sincerely opposed to the plans from honorable motives, but very often such action is taken by some who institute litigation at a critical moment in the hope of creating a nuisance and thereby induce the reorganization managers to give them unusual advantages over the ordinary creditors. In other words, they hold up the proceedings for a price.

PROCEDURE IN REORGANIZATIONS.—The procedure in reorganizations may be divided into five phases which are here presented consecutively, but in operation may be concurrent or at least overlapping. These phases have numerous subdivisions in accordance with the nature of each problem, some of the more prominent ones being given herein. These phases are:

1. Examinations
2. Agreements of committees
3. Operation of companies during reorganization
4. Satisfying creditors
5. Making plans effective

EXAMINATIONS.—The first step in reorganizations to be taken by committees appointed for that purpose is to have thorough examinations made of the concerns. Such examinations should cover the following lines: **accounting; engineering or operating; legal and business or economic.**

Accounting.—Thorough examinations and analyses should be made of the accounts of the concerns to be reorganized to determine **their assets and liabilities and earning capacity.** Such examinations will also aid in ascertaining the cause of difficulties. To accept financial statements issued by the old management would be extremely unsafe. Furthermore, it would be practically impossible to work out practical and effective plans of reorganization until correct statements of assets, liabilities, proprietory interest, earnings and expenses are obtained.

Engineering or Operating.—Sometimes it is necessary to have engineers make examinations to ascertain the **status of the property,** what may be required and what it would cost to provide adequate facilities suitable for the operation of the reorganized company.

Legal.—The legal aspects of these investigations are important, in ascertaining the **rights of the parties,** such as the different classes of creditors, bondholders, and stockholders and in laying the foundation for future negotiation for the purpose of providing the proper procedure to establish the reorganized company.

PUBLIC ANNOUNCEMENT OF EXAMINATIONS IN VIEW OF REORGANIZATION.—It is generally necessary to make a public announcement to get the interest of all the bondholders and different classes of stockholders in order to secure deposits of their holdings.

AGREEMENT OF COMMITTEES.—A second step in reorganizations consists of working out **tentative agreements** between the various committees representing the different interests. These negotiations are carried on while the examinations are under way, but final agreements cannot be made, however, until all the examinations are completed.

OPERATION OF THE COMPANY.—The third phase is the operation of the company during the period of reorganization. The reorganization manager

or the receiver, if one is appointed, must make arrangements for conducting the business with all possible economy. The internal operating organization may be reorganized with a view to obtaining greater economy and efficiency. Those branches or products which are not essential or are unprofitable may be disposed of or discontinued.

ASSESSMENT ON STOCK.—Frequently stockholders are required to pay assessments to provide needed cash. Usually this is the only means committees have of raising additional cash. The stockholders in order to preserve what equities they still have, often respond and pay such assessments. Legally speaking, their equity may be wiped out, but they generally seize the opportunity to take stock in the new company for their assessment in the hope of eventually recovering a part of their loss.

Preferred stockholders can sometimes be induced to surrender their preference by any one of several different methods. For instance, common stock may be given them for their accumulated dividends which have not been paid, and they may also accept new preferred stock without the cumulative feature in the reorganized company. In some cases they may be induced to part with their rights of preference by receiving new common stock, share for share, in exchange for their preferred. In such a case, the old common stock would either accept a much smaller proportion of new common, or else, as described in the preceding paragraph, would be wiped out entirely, except upon the payment of an assessment.

MAKING REORGANIZATION PLANS EFFECTIVE.—The **final step in a reorganization** is to put the plan into operation. This is essentially a legal phase. After the reorganization committee has formulated plans acceptable to the various committees of security holders or to the courts, if the company is in the hands of a receiver, it becomes necessary to arrange for the exchange of old securities for new ones, levy and collect assessments and complete whatever details the revised plans call for. Where there is a unanimous acceptance by the security holders no difficulty is involved. When it is impossible to effect reorganizations in the manner described, it may be necessary for those security holders who agree to form a new company and bring about a judicial sale of the property of the old corporation and to arrange for the purchase of such property by a new company to be organized by the assenting security holders.

In those cases where the reorganization can be made effective only through **judicial sale,** the reorganization committee representing the assenting security holders may use securities evidencing debt, which have been deposited with it, in payment of the property. After acquiring the property the new company will issue its securities to the former security holders of the old company in accordance with the terms agreed upon.

REORGANIZATION THROUGH FORECLOSURE.—In most of the reorganizations of companies owning considerable real property where there are conflicting interests on the part of stockholders and various classes of bondholders, it is usually necessary to resort to foreclosure under one or more issues of mortgage bonds in order to force through the plan of reorganization. The **procedure** may be briefly summarized as follows:

The protective committees appointed by bondholders select their representatives to serve on the committee on reorganization, which formulates its plan of reorganization for submittal to the various interests. Meanwhile, the proceedings in foreclosure are under way. The property is sold, bought in by representatives of the committee on reorganization and stocks and bonds distributed in accordance with the prearranged plan.

After the plan of reorganization has been approved by the bondholders and the court has entered the decree of foreclosure, the property is sold at public sale. The following is a part of the **notice of sale** of the National Conduit & Cable Co., Inc:

NATIONAL CONDUIT & CABLE COMPANY, INC.
NOTICE OF SALE

NOTICE IS HEREBY GIVEN, pursuant to an Amended Foreclosure Decree, made August 15, 1923.... that I, ROBERT H. GAY, appointed Special Master in and by the aforesaid Decree, will sell at public auction to the highest bidder or bidders, upon the premises at the main office building of the defendant, National Conduit & Cable Company, Inc., opposite the passenger station of the New York Central Railroad Company, in the Village of Hastings-on-Hudson, County of Westchester and State of New York, at 1.30 o'clock P. M., United States Eastern Standard Time, on the 14th day of September, 1923, the properties in said Decree described and thereby ordered to be sold, to wit:

I. All properties of every kind, character and description covered by the lien of the First Mortgage of the defendant, dated April 1, 1917; and

II. All other properties of every kind, character and description of the defendant and of its Receiver.

A brief general description of the properties to be sold at said sale is as follows:

I. Properties subject to lien of First Mortgage:

All those certain lots, pieces or parcels of land and land under water of the Hudson River, with the buildings and improvements thereon erected, situate, lying and being in the Village of Hastings, Town of Greenburgh, County of Westchester and State of New York, bounded and described as follows:

(*Here follow descriptions of the properties*)

Said sale will be made in the manner provided by said Decree and subject to the terms and provisions thereof, and all bids for any property offered will be received and noted only on condition that said property may subsequently be offered, knocked down and sold, as in said Decree provided.

There will first be offered for sale separately and as one parcel, all of the properties embraced within Parcel Three. There will next be offered for sale separately and as one parcel, all of the properties embraced within Parcel One, including the so-called "North Plant." There will next be offered for sale, separately and as one parcel, all of the properties embraced within Parcel Two, being the so-called "South Plant." There will next be offered for sale separately and as one parcel, all of the properties embraced within Parcel One and Parcel Two. There will finally be offered for sale as an entirety, all of the properties of the Company embraced within Parcels One, Two and Three. If the highest bid received and noted for said properties, when so offered for sale as an entirety, shall equal or exceed the aggregate of the highest bids therefor when offered for sale in parcels, then all of said properties shall be stricken off and sold as an entirety to the highest bidder therefor. If, however, the highest bid received and noted for said properties as an entirety shall be less than the aggregate of the highest bids therefor when offered in parcels, then the parcels offered for sale shall be stricken off and sold to the highest bidders for said respective parcels.

Article Tenth of said Decree provides that the Receiver shall, not less than ten days prior to the date fixed for the sale, file with the Clerk of said Court, an advisory statement or statements showing as definitely as practicable, as of the last day of the preceding month, all indebtedness, obligations, liabilities, contracts, leases, agreements, claims and demands, and reference is hereby made to said statement or statements.

As more fully provided by said Decree:

I. Said sale will be made without valuation, appraisement, redemption or extension.

II. In case of adjournment or postponement of the sale, the Special Master, without further notice or advertisement, may proceed with the sale on any day to which the same may have been adjourned.

III. The Trustee or any holder of the bonds or any creditor or any stockholder of the Company or any party to this Consolidated Cause or to any constituent cause may bid at the sale, and if a successful bidder, may purchase in his, its or their right.

Upset Prices

IV. The Special Master will not accept any bid:

For Parcel One, less than $300,000.00.

For Parcel Two, less than $600,000.00.

For all properties covered by the Lien of the First Mortgage being Parcels One and Two together, less than $900,000.00.

For Parcel Three, less than $2,100,000.00.

For all properties as an entirety, being Parcels One, Two and Three together, less than $3,000,000.00.

V. The Special Master will receive no bid from anyone offering to bid who shall not, prior to any offering by the Special Master under said Decree, deposit with the Special Master and deliver to him as a pledge that he will make good his bid in the event of its acceptance, in cash or certified check of some National Bank or Trust Company in the City of New York, acceptable to the Special Master, and made and endorsed to his order, or in the First Mortgage Six Per Cent Ten Year Sinking Fund Gold Bonds (hereafter called "bonds") of the defendant (such bonds to be in bearer form, and, if coupon bonds, accompanied by the coupon of October 1, 1921, and all subsequent coupons) or in respect of Parcel Three in claims against the said defendant which have been heretofore presented to and filed with the Receiver in this Consolidated Cause or in the constituent causes or either of them, and admitted or allowed by the Receiver accompanied by proper and appropriate assignments thereof to the Special Master; in respect of Parcels One and Two, partly in cash and/or certified check, and/or partly in such bonds but in the same relative proportions; and in respect of Parcel Three partly in cash, and/or certified check and/or partly in bonds and/or partly in such claims accompanied by such assignments, but in the same relative proportions.

1. In case of Parcel One, when offered separately, the sum of $30,000 in cash or such certified check, or $60,000 face amount of such bonds;
2. In case of Parcel Two, when offered separately, the sum of $60,000 in cash or such certified check, or $120,000 face amount of such bonds;
3. In case of Parcels One and Two, when offered together, the sum of $90,000 in cash or such certified check, or $180,000 face amount of such bonds;
4. In case of Parcel Three, when offered separately, the sum of $210,000 in cash or such certified check, or $420,000 face amount of such bonds or an equivalent face amount of such claims accompanied by such assignments;
5. In case of Parcels One, Two and Three, when offered together, $300,000 in cash or such certified check, or $600,000 face amount of such bonds or an amount in cash and/or such certified check and/or such bonds at least sufficient to qualify the bidder to bid for Parcels One and Two, and the balance in the requisite face amount of such claims.

A deposit made by any bidder for a separate parcel may, so far as applicable, be applied on account of the required deposit, in order to qualify him to bid for the same property when offered for sale with any property when offered as an entirety.

Any deposit received from an unsuccessful bidder will be returned to him when the property shall be struck down. The deposit received from the successful bidder or bidders will be applied on account of the purchase price of the property purchased by such bidder or bidders.

If any sale shall not be confirmed, the deposit made by the accepted bidder at such sale will be forthwith returned to such bidder.

The deposit made by any successful bidder shall, in accordance with the provisions of said Decree, be forfeited in the event of his failure to comply with any order of the court within ten days after the entry thereof, requiring payment of or on account of the balance of the purchase price.

The purchaser (which term includes purchasers and includes also the successors and assigns of any purchaser) to the extent permitted by said Decree and otherwise in accordance with the provisions thereof, may turn over to the Special Master on account of the purchase price. at their distributive value, bonds, coupons and claims entitled to be paid out of the proceeds of sale.

In lieu of bonds, coupons or claims tendered for deposit to qualify a bidder or tendered by a purchaser on account of the purchase price, the Special Master will accept the certifi-

cate of any national bank or trust company in the City of New York, N. Y., acceptable to the Special Master, that it holds, subject to the order of the Special Master, bonds or notes of the required character in bearer form and, if in coupon form, accompanied by the specified coupons.

The term, "in bearer form," as used herein with reference to securities includes both securities expressed to be payable to bearer and securities accompanied by an assignment in blank duly executed.

VI. Any successful bidder may assign, transfer and set over his bid, in whole or in part, and all or any part of his rights and interests under the said Decree.

Any purchaser, his successors and assigns, may enter his appearance in this consolidated cause and in the constituent causes, and exercise the rights thereafter conferred by said Decree. Any purchaser, his successors or assigns, shall have the right for a period of two months after conveyance of the property purchased by him, to elect whether or not to assume or adopt any lease or contract made by the Company, as part of the property embraced in said conveyance; and may elect not to take or accept any part of the property purchased by giving written notice of his election to the Special Master at any time prior to the execution and delivery of the deed or other instruments of conveyance from the Special Master, but no such election shall diminish or affect the purchase price, to be paid by such purchaser.

Neither any purchaser nor the successors or assigns of any purchaser shall be required to see to the application of any purchase money.

VII. The purchaser or purchasers of Parcel One, Parcel Two or Parcel Three, their successor or successors and assigns, as part of the purchase price, and in addition to the accepted bid of such purchaser, shall pay, satisfy, assume and discharge:

(A) Any unpaid compensation which has been or shall be allowed to the Special Master heretofore appointed in said Consolidated Cause, and any unpaid compensation that has been or shall be allowed to the Receiver in said Cause or in either of the constituent causes and his solicitors, and also any unpaid indebtedness and liabilities and all contracts and guarantees of the Receiver made or incurred in said Cause, or in either of the constituent causes, and any other administrative expenses incurred or to be incurred in the management or operation of the properties purchased and otherwise in the discharge of his duties as such Receiver between July 15, 1921, the date of his appointment, and the date of the delivery by the Receiver of possession of the properties sold;

(B) Any unpaid claims of creditors of the Company which have been or shall be admitted by the parties in interest or adjudged by said Court to be prior in lien or superior in equity to the mortgage.

(C) All just and legal indebtedness of the Company payment of which was authorized by the order of said Court appointing the Receiver in said Cause or in either constituent cause, and which shall not at the time of delivery by the Receiver of possession of the property sold have been paid or satisfied, to the extent that they have not been paid or shall not have been paid out of moneys in the possession of the Receiver.

VIII. For a more particular description of the property to be sold and of the terms of sale, and for the provisions of said Decree, and other information, intending purchasers are hereby referred to the said Decree and to the record in said Consolidated Cause and in the constituent causes on file in the office of the Clerk of said Court, and to the statement or statements of the Receiver to be filed with the Clerk of said Court as directed by said Decree.

Dated August 17, 1923.

ROBERT H. GAY,
Special Master

FIXING THE UPSET PRICE.—A very important problem in connection with the foreclosure sale is fixing the **upset (minimum) price.** This should be sufficiently high so as not to be unfair to the non-assenting bondholders, but should be sufficiently low so that the distributive share of the proceeds of sale payable to the non-assenting bondholders is not so large as to impose a serious burden upon the reorganizers or to discourage bondholders from participating in the plan of reorganization. Sometimes reorganizations have been held up for years because the courts, either at their own motion or at the instance of

non-assenting bondholders, stockholders, or creditors, have fixed the upset price so high that the reorganizers were unable or unwilling to provide the cash necessary to go on with the reorganization.

BUYING IN THE PROPERTY.—Part of the plan of reorganization provides for acquiring the property of the insolvent corporation. The committee on reorganization generally appoints a sub-committee designated as the **purchasing committee** to purchase the property at the foreclosure sale. This subcommittee must have definite instructions as to how high it shall bid in case there are competitive bidders. As a rule the purchasing committee can pay the major part of the purchase price by surrendering the bonds which have been placed with the protective committee while rival bidders, unless they represent a rival bondholders' committee, must pay in cash. As a protection against bogus or hold-up bids, the decree of foreclosure sale requires that a substantial deposit be made to qualify in the bidding.

The foreclosure sale should be conducted fairly and openly and in strict compliance with the decree and published terms of the sale, so that there is no basis for a successful attack upon the sale, particularly if there are a substantial number of non-assenting security holders.

As stated in the previous paragraph, when the property is sold under foreclosure, the reorganization committee may **use the bonds deposited with it in part payment of the purchase price.** The value at which each bond is accepted in this payment is par plus unpaid coupons if the price is equal to or more than the amount of the indebtedness. Otherwise that value is only that proportion of par and unpaid coupons which the committee's holdings is of the total bond issue. If the reorganization committee controls a large part of the outstanding bond issue, it is in a better position than any other purchaser, who would have to pay entirely or mostly in cash. Thus, if the committee controls $4,000,000 bonds out of a total issue of $5,000,000, and the purchase price is $4,500,000, it need only raise $900,000 in cash, as its bonds will be accepted at a valuation of $3,600,000, or 80% of the purchase price, since that is the proportion of the bond issue it holds. (This leaves the unpaid interest out of consideration.) On the other hand, a competitor who had no bonds to deliver in payment would have to pay the total price of $4,500,000 in cash.

After the sale, the property should be transferred to the reorganization committee, or to the new corporation, if it is formed. The committee then publishes notices that new securities are ready for distribution and that each depositor will receive his share of new securities upon surrendering to the depository his certificate of deposit.

VOTING TRUSTS.—Very often where corporations are in the process of reorganization, they must continue in operation and in order to be sure that the security holders of the corporation will adhere to the policy contemplated in the reorganization, it is desirable to appoint trustees for stockholders to insure the control of the corporation during that period. Ordinarily the question of electing directors of the company and officers is left to the voting trustees, but questions of a radical nature such as the sale of the property, increase of capital stock and the creation of a mortgage, are generally presented to the holders of the voting trust certificates for their approval or disapproval.

WHAT BECOMES OF NON-ASSENTING STOCKHOLDERS.—The stockholders of a corporation who do not agree to a plan of reorganization and who refuse, or are unable, to pay the assessments, or exchange their stock for the securities of the new corporation, are in the position of holding stock which is frequently of little or no value. A concrete instance of such a case is the fate

of the holders of some 25,000 shares of the Northern Pacific Railroad Co. who refused to exchange their shares for those of the new reorganized company, the Northern Pacific Railway Co. The reorganization was completed without them and these 25,000 shares of the old company became worthless.

COURTS' POWER IN REORGANIZATIONS.—The courts have **no power to force a reorganization plan** upon unwilling minority bondholders. Any attempt to do so would be, and has been, construed as contravening the doctrine of the sanctity of contracts, and as such has been declared in violation of the Federal constitution. Courts not infrequently interfere in reorganizations but only on the ground that some legal right of one class of the participants has been violated. The only way open to the reorganizers, representing the majority bondholders, to get rid of an objecting minority is to pay them off in cash for the amount of their share in the proceeds received in the foreclosure sale, which may be the full amount of indebtedness or only a percentage of it, depending upon the amount brought by the sale.

This, however, is only true of the holders of bonds secured by the mortgage being foreclosed. Junior bondholders, unsecured creditors, and stockholders are all at the mercy of the reorganizers, as the courts will not interfere with the mortgage bondholders in the full enjoyment of their rights, which frequently result in their getting possession of practically all the property owned by the company. However, the courts have ruled that the reorganizers must deal equitably as between the other classes of security holders. They cannot, for example, admit the stockholders into the reorganization and "freeze out" the unsecured creditors.

PURPOSES OF REORGANIZATION.—The purposes of reorganization are to discover the causes of a company's difficulties and to find and apply the proper remedies, which may be classified as follows:

1. Remove the cause of financial embarrassment.
2. Repair, if possible, the loss caused by the trouble.
3. Satisfy creditors who are in a position to insist upon cash settlements.
4. Provide capable management.
5. Furnish sufficient working capital and such new fixed assets as may be necessary.
6. Reconstruct the financial plan.

REMOVING THE CAUSES OF FINANCIAL DIFFICULTIES.—The primary object of reorganization is to remove the cause of financial difficulties. Unless this is accomplished all plans of reorganization are futile. The railroad history of the United States furnishes numerous instances of reorganizations which have failed to go to the root of their troubles. The Atchison, Topeka & Santa Fe Railroad and the Philadelphia & Reading Railway each went through three reorganizations. In each case the succeeding reorganized companies expanded faster than their capital and returns warranted. This was due primarily to overextension on their available capital. In both instances the earlier reorganizations failed to accomplish their purposes because they did not go to the root of their trouble.

BREACH OF TRUST BY DIRECTORS.—Where the financial difficulties are due to misfeasance or malfeasance on the part of the directors, they should be called to account in legal proceedings for the recovery of money wherever possible. Such situations should be carefully investigated before legal action is taken. In the case of the insolvency of J. B. Greenhut & Co., a large New York department store, a committee of creditors made an investigation and reported as follows:

"As a result of the numerous conferences that have been held, four matters in particular are calling for investigation on the part of the merchandise creditors:

1. The recent deposit of large amounts of cash with banks and trust companies which were heavy creditors of the J. B. Greenhut Company, while merchandise creditors remained unpaid.
2. The heavy salaries paid to corporate officers, including one annual salary of $100,000 and two of $50,000 each.
3. The issue of a very large amount of second mortgage bonds some four years ago for the purchase of real estate from persons connected with the corporation.
4. The marked difference between the most recent financial statements given by the bankrupt to the mercantile agencies and the showing disclosed by the report of the receivers."

REORGANIZATION OF MANAGEMENT.—An investigation will reveal the faults of the old management and whether a new management is required. In too many cases incompetent and extravagant management is retained.

If extensions are necessary, the creditors may want some assurance that a satisfactory management will be chosen and kept in power. If new capital is required, the old stockholders or creditors may be asked to furnish it. They will, however, be reluctant to do this unless they are assured that a capable management is going to conduct the business.

In many reorganizations the larger creditors may insist on having their representatives added to the board of directors, and very often **such creditors dictate the policy** of the reorganized company. Generally the bankers who furnish additional funds for the reorganization insist on having their representative on the board of directors and very often designate who shall be the treasurer, comptroller, or president. As a rule these representatives are helpful in the rehabilitation of the management as well as necessary in the refinancing.

PROVIDING WORKING CAPITAL.—Very often the cause of failure is lack of working capital and some plan must be devised to furnish additional funds. Material and machinery supply men may be induced to give further credit to an insolvent concern when they can be shown that such assistance is indispensable to save the concern from bankruptcy. When such creditors have confidence in the new management they will grant such assistance for two reasons: (1), such further aid may save their whole claim, and (2), the new management may continue as a good customer.

RECONSTRUCTION OF FINANCIAL PLAN.—Where the **capitalization is too large** in proportion to earnings, the company must reduce or recast its capital structure. Several questions naturally arise. How much should the nominal or book capital be reduced and what class of the security holders shall bear the sacrifice in the reduction, and in what amount? When additional funds are required what securities will be given and what interest will they carry? All these things are the subject of negotiation and must be settled before a reorganization can be made effective.

RESULTS OF REORGANIZATIONS.—In a broad sense financial reorganizations are more than **a series of compromises** and forced sacrifices imposed on security holders. When reorganizations are worked out properly they result in providing concerns with new financial bases which replace the old ones that have proved faulty. The readjusted financial structure should enable them to continue business thereafter under more favorable conditions and be in better position to earn profits for their stockholders.

Every reorganization seeks to accomplish one or more of the following results:

1. Raise additional capital for operation of the business.
2. Reduce fixed charges.
3. Simplify the financial structure of the company.
4. Provide facilities for raising capital in the future if needed.
5. Liquidate urgent obligations.
6. Eliminate unprofitable lines.
7. Provide for unpaid dividends accumulated on preferred stock.

ADDITIONAL CASH FOR OPERATION.—Generally the **most urgent problem** in the reorganization of corporations is to obtain additional funds for working capital and to liquidate indebtedness. Three possible ways of accomplishing this are:

1. Selling securities.
2. Assessing stockholders, or both stockholders and bondholders.
3. Liquidation of current indebtedness by issuing bonds or stock in payment.
4. Sale of assets.

If securities of other corporations are owned these may be available for sale; but usually this expedient for raising capital is exhausted before the receivership occurs. Sometimes there are assets sufficiently free from lien to permit the issuance of new securities which are marketed at a heavy discount. The tendency is to treat old security holders harshly in order to provide issues that are attractive to outside investors.

Assessments are levied on common stockholders in nearly every reorganization, the ostensible reward being an interest in the reorganized concern. Occasionally preferred stockholders and junior bondholders are assessed; in short, any security holder not fully protected by marketable assets may be assessed. If he refuses to pay, a new corporation is organized which at judicial sale turns in prior lien securities in payment for property of the corporation, thus automatically wiping out the junior security holder. In return for the assessment the person assessed is usually given new stock of nominal value and possibly something in securities of better grade. In the reorganization of the San Francisco Railway Co. in 1916 an assessment of $50 per $100 par of old first preferred, second preferred, and common was levied. In return stockholders received $50 par of prior lien bonds and a bonus of common stock—the first preferred receiving $100 par of new common, the second preferred $90, the old common $82.

If the assessment is too drastic it may not be profitable for the stockholder to pay; consequently the assessment should be made sufficiently attractive to secure the money asked. It is the experience of most persons paying assessments in railroad reorganizations that the increase in value of their holdings following the reorganizations has fully justified paying the assessment.

Funding floating indebtedness by issuance of long-term securities is practicable only when the company is fundamentally prosperous and is merely suffering from temporary shortage of cash. This plan was pursued in both Westinghouse reorganizations. In the reorganization of the Goodyear Tire & Rubber Co., in 1921, the merchandise creditors received 125% of the amounts due them on January 1 of that year, for merchandise actually delivered, in prior preference 8% cumulative stock; while in the case of commitments for merchandise not delivered prior to January 1, 1921, but for which specifications and prices had been fixed on that date, they received 75% in cash and 28% in preference shares.

REORGANIZATION PLAN.—The following is a typical reorganization plan for raising capital for operation.

NEW YORK, MARCH 28, 1924

To the Stockholders of

PIERCE OIL CORPORATION

Enclosed herewith you will find notice for a Special Meeting of the stockholders of Pierce Oil Corporation to be held on May 7, 1924, and the report of the Company for the year ended December 31, 1923.

The annual reports for the years 1921 and 1922 which have been heretofore sent to the stockholders, and the report enclosed herewith for the year 1923, show plainly the unsatisfactory result of operations during the last three years, together with the principal causes that have contributed to this result, and the critical financial condition of the Company that has existed for some time past.

The total losses for these three years amount to $16,797,453, without giving effect to discount on capital stock, unadjudicated claims and contingent liabilities, which aggregate a further $2,466,024; amounting to a total of $19,263,477. A part of this loss, including, among other things, the judgment in favor of the Receiver of the International & Great Northern Railway Company (amounting with interest to approximately $2,200,000) should properly be regarded, however, as a charge against earnings for the period prior to 1921, rather than as a charge against the earnings for the last three years.

As a result of these losses, and of other large sums expended unproductively, the Company's credit position had been destroyed prior to July, 1923, when the present board of directors and management took charge of its affairs; it was then without working capital to conduct its business; it was unable to meet its most pressing obligations; and it is only by reason of the generous action of certain directors and of others interested in the welfare of the Company, who advanced large sums on the Company's unsecured notes bearing six per cent interest, that receivership has been averted up to the present time.

Since July, 1923, the Company has been able to meet the difficult trade conditions caused by the low market prices for petroleum products only by the most drastic economy and with the assistance of the above mentioned advances. Operating expenses have been reduced in the amount of $1,300,000 per annum and efficiency has been improved, as a result of which the Company has been enabled to maintain its trade position until it is now operating at a small profit.

While this indicates that the business is inherently sound, it by no means meets the critical situation with which the Company is confronted, as there is urgent need for additional funds which cannot be supplied from earnings, or borrowed under existing conditions of the Company's credit and capital structure.

The purposes for which new money is required are:

(1) The International & Great Northern judgment (amounting with interest to approximately $2,200,000) is now on appeal; and provision must be made to meet this situation. Inventory in excess of $2,500,000 is pledged to secure this judgment. If this judgment is affirmed upon appeal, unless new money can be raised to meet it, this inventory must be sold which would result in a receivership for the Company.

(2) Approximately $650,000 is being borrowed by the Company at a prohibitive cost by means of the pledge of accounts receivable. Aside from the expense of this arrangement, into which the Company was forced by its unfortunate financial situation, it is destructive of the Company's credit and should be terminated at once.

(3) Certain directors, and others interested in the Company's welfare, have made advances in amount of $650,000 on the unsecured notes of the Company, which they cannot be expected to extend indefinitely, and have also recently advanced an additional $500,000 on an acceptance credit as to which they are inadequately secured.

(4) The manufacturing and marketing plants require an immediate expenditure of about $2,000,000 to put them in a competitive operating condition. Parts of the plants are in a rundown condition and must be repaired at once. The present refining equipment is in large part inadequate and out of date, and the

marketing department is in urgent need of improved facilities. These improvements and betterments in the amount of $2,000,000 will, in the opinion of independent engineers, result in a large increase in earning power.

(5) The Company is in need of a substantial increase in its working capital if it is to be enabled to operate profitably and to take advantage of favorable market conditions.

No plan for raising the necessary new capital by a bond issue has seemed feasible to your directors because the terms of the indenture securing the debentures now outstanding would necessitate their retirement, in that event, at 107½%, thus requiring the raising of $1,720,000 of additional capital for this purpose alone. Furthermore, the interest and sinking fund charges of a bond issue of large size would necessarily be so great as to create a fundamentally unsound financial structure, and, in view of the Company's present credit situation, it would be impossible to market any such security except upon destructive terms.

In order to meet this unfortunate situation, and at the same time save the property from the grave dangers with which it is threatened and secure for the business the large additional earnings which it is believed will result from the proposed plant expenditures and the establishment of sound credit, your directors, after careful consideration, have agreed upon the plan which is now presented for your approval. This plan, in the judgment of your directors, offers the most practicable method for saving and reestablishing the business of the Company without an assessment on the stockholders, and without compelling them to furnish the required capital at the peril of losing their entire investment.

Your directors accordingly have, subject to the approval of the stockholders, made the following arrangements:

1. A new corporation is to be organized under the name of Pierce Petroleum Corporation, or some other name, with 2,500,000 shares of no par value stock, all of one class and all of which are to be issued. This new Company will acquire, either directly or through subsidiaries, all of the assets (except treasury stock), and will assume all of the liabilities, of the old Company, and will issue and deliver to the old Company not more than 1,200,000 shares and not less than 1,100,000 shares of its stock, the exact amount to be determined as stated in the next paragraph.

2. The new Company will offer to the stockholders of the old Company the right to subscribe for 1,300,000 shares of its stock at $7.00 per share, this right to be given to the stockholders of the old Company in the ratio of five shares of new stock for every one share of preferred stock of the old Company and one-half share of new stock for every one share of common stock of the old Company. The stockholders of the old Company will also be given the privilege of applying, subject to allotment, for additional stock of the new Company at the price of $7.00 per share, and such applications will be filled pro rata out of any part of the 1,300,000 shares not subscribed for by the stockholders under their initial rights. For every share of stock subscribed for by the stockholders under their initial rights, or allotted to them upon application, 1/13th of a share of new stock will be added to the minimum of 1,100,000 shares provided above to be issued and delivered by the new Company to the old Company, making a maximum of 1,200,000 shares.

3. If the plan is approved by the stockholders, subscription warrants for stock of the new Company in the ratios above set forth will be mailed to the stockholders of record as of a date shortly after such approval. These warrants will provide that payment must be made in full on or before a date which will be specified in the warrants. Accompanying the subscription warrants will be application forms giving the stockholders the privilege above mentioned to subscribe, subject to allotment, to such part of the 1,300,000 shares as shall not be subscribed for under the subscription warrants. Payment in full for any additional stock so applied for will be required as in the case of subscriptions under warrants.

4. To insure that the necessary new capital will be obtained and that the entire 1,300,000 shares of the new Company will be sold for cash, even though the stockholders take less than that amount, your directors have entered into an agreement, subject to the stockholders' approval, with a syndicate consisting of Messrs. Lehman Brothers, Goldman, Sachs & Co., Hornblower & Weeks, and their associates (among whom are directors of your Company) to underwrite the offer to stockholders by agreeing, subject to the conditions therein contained, to purchase at $7.00 per share any of the stock not subscribed for by the stockholders. As compensation for its agreement to underwrite such offer, the syndicate is to receive a commission of 75 cents per share for every share underwritten;

and, for every share which the syndicate shall be required to take up owing to the failure of the stockholders to subscribe, an additional commission of 75 cents, together with 1/13th of a share of new stock. Compensation will be paid at the rate of 10 cents per share underwritten to each of the three banking houses for their services in organizing and managing the syndicate.

If the foregoing plan is approved by the stockholders the following additional proposals, which are hereby submitted by your directors but not as a part of the plan, will be separately voted upon:—

(a) Your directors have entered into an agreement for settling the judgment which the Receiver of the International & Great Northern Railway Company has obtained against your Company amounting with interest to approximately $2,200,000, provided the approval of sufficient stockholders is obtained, by the payment of $1,550,000 in cash, and the Receiver has agreed to accept this amount in settlement on a condition that payment be made on or before July 5, 1924. In the meanwhile the argument of the appeal from this judgment which was set for April 1, 1924, has been postponed until the fall term of the Court. Your directors are of the opinion that this settlement is in the best interests of the Company in view of the situation as a whole and of the large additional loss that would result should the judgment be affirmed. A resolution will accordingly be submitted to the stockholders approving a settlement upon these terms.

(b) A resolution will be submitted to the stockholders authorizing an arrangement whereby such of the stockholders of the old Company as shall desire to avail themselves of the opportunity may be enabled, by surrender of preferred and common stock together, to receive shares of the stock of the new Company which are to go to the old Company. The provisions of such arrangement will be as follows: Every stockholder who surrenders one share of preferred stock and eight shares of common stock of the old Company will receive in exchange a maximum of slightly over eight shares or a minimum of not less than seven and two-fifths shares of stock of the new Company (depending upon whether the maximum of 1,200,000 shares of the new Company, or a lesser amount, goes to the old Company as above provided), together with a pro rata share of any dividends received by the old Company upon stock of the new Company in its treasury, subject to the following two conditions: Firstly, the exchange cannot be made until July 1, 1925, and no stock may be deposited for exchange after that date, and secondly, the exchange cannot be made unless at that time a total of at least 25,000 shares of preferred stock and 200,000 shares of common stock of the old Company are deposited for exchange.

Attention is directed to the fact that if this proposal is adopted the exchange will be entirely voluntary; and those stockholders who do not desire to avail themselves of it will continue to hold their shares of existing stock of either class with their relative rights unchanged, and such shares will continue to represent the same pro rata interest in the stock of the new Company to be received by the old Company which they would have represented if this proposal had not been adopted.

If this proposal is adopted stockholders will be advised some time prior to July 1, 1925, of the further necessary steps to be taken by them.

Enclosed herewith is a balance sheet of the new Company (certified by Messrs. Price, Waterhouse & Co.) giving effect to the proposed plan and based upon the minimum amount of new capital to be raised. The fixed assets, as set forth in this balance sheet, are valued on a conservative basis, and upon such balance sheet no value is placed upon oil lands or oil leases, either in the United States or in Mexico, because of the difficulty of correctly valuing such properties at the present time and until their true value has been more fully demonstrated. Furthermore, no value whatever is placed in such balance sheet upon unadjudicated claims in favor of the Company, which it is believed amount to a substantial sum.

The special meeting of stockholders, to be held on May 7, 1924, has been called to approve the proposed plan, to authorize the sale of the assets of the old Company to the new Company in accordance therewith, and to act upon the other matters specified in the notice of meeting.

For the purpose of this special meeting, the stock transfer books of the Company will be closed at the close of business on April 7, 1924, and will, unless otherwise ordered by the board of directors, be reopened on the day following the final adjournment of the meeting.

Application will, in due course, be made to list the stock of the new Company on the New York Stock Exchange.

A proxy is enclosed herewith. Inasmuch as a large vote of the stock of the Company is required to carry out the proposed plan, you are earnestly requested to execute and mail your proxy immediately, unless you can attend the meeting in person.

All stockholders are urged, in order that they may be enabled to vote upon the plan and to assure the receipt by them of the subscription warrants, to promptly—and in no event later than April 7, 1924—have transferred into their own names or into the names of their nominees all shares of stock owned by them, if standing in the names of others.

The plan outlined above is proposed by your directors after careful consideration. If the plan is approved, your directors believe that, with the added working capital and improved plants and marketing facilities, together with the reduction in expense and increase in efficiency already apparent, the business should again show substantial earning power. On the other hand, if the plan is not approved, your directors are of the opinion that a receivership for your Company is likely to result. In such event the stockholders, both preferred and common, will be faced with the alternative either of paying an assessment on their stock sufficient to meet all the Company's liabilities or else of jeopardizing their entire equity in the property.

By order of the Board of Directors,
W. H. Coverdale,
Chairman of the Board

Be sure: (1) To have transferred into your name or into the name of your nominee all shares of stock owned by you, if standing in the names of others; and (2) To execute and mail the enclosed proxy immediately.

PIERCE OIL CORPORATION

PROXY

KNOW ALL MEN BY THESE PRESENTS, that I, the undersigned, being a stockholder of PIERCE OIL CORPORATION, a Virginia corporation, have constituted and appointed, and do hereby constitute and appoint W. H. Coverdale, W. W. Colpitts, Herbert H. Lehman, J. W. Prentiss, Arthur Sachs and Alvin Untermyer, or any one or more of them, my proxies, agents and attorneys in fact, for me and in my name, place and stead, to vote all shares of stock in said corporation owned by me or standing in my name, at a special meeting of the stockholders of said corporation to be held at the principal office of said Corporation, Room 915, Mutual Building, City of Richmond, State of Virginia, on May 7, 1924, and at any adjournment or adjournments of said meeting, upon any act, matter or thing that may be brought before said meeting, and without limitation of the general powers hereby conferred especially to vote in favor of:

1. Authorizing the sale, assignment, transfer, conveyance and delivery by the Board of Directors of the Corporation of all of the property, assets and property right of the Corporation (other than treasury stock) as an entirety, to a corporation to be formed under the name of Pierce Petroleum Corporation, or some other name (hereinafter called the "New Company") and/or its subsidiaries, such New Company to have an authorized capital of 2,500,000 shares of no par value, in consideration of not more than 1,200,000 and not less than 1,100,000 shares of the New Company and in further consideration of the assumption by the New Company of all the liabilities of the Corporation (except capital stock) and upon such further terms and conditions as may be determined at the meeting and as the Board of Directors in their discretion may deem advisable, the certificate of incorporation and by-laws of the New Company to be in such form and to contain such provisions as the Board of Directors of the Corporation may determine and authorizing the Directors to cause the New Company to offer to the stockholders of this Corporation the right to subscribe for 1,300,000 shares of stock of the New Company at $7.00 per share, this right to be given to the stockholders of this Corporation in the ratio of five shares of stock of the New Company for every one share of Preferred Stock of this Corporation and one-half share of stock of the New Company for every one share of Common Stock of this Corporation and further to cause the stockholders of this Corporation to be given the privilege of applying, subject to allotment, for additional shares of the New Company at the same price, such applications to be filled pro rata out of any part

of the 1,300,000 shares not subscribed for by the stockholders under their initial rights; such right and privilege to be given for such period and upon such further terms and conditions as the Board of Directors of this Corporation may deem advisable, and ratifying an agreement dated March 24, 1924, between the Corporation and certain bankers (to be submitted to the meeting) providing upon the terms and conditions in said agreement set forth, for the underwriting by a syndicate of the offer of stock of the New Company to the stockholders of this Corporation as above set forth, and under which agreement Directors of this Corporation, either directly or indirectly, are to receive compensation and participate in such syndicate; and authorizing the Board of Directors and officers of the Corporation to do all things necessary or proper to carry out such agreement.

And if such authorization and ratification shall be voted, to vote in favor of:

(*See note below.*) 2. Approving settling the claim of the Receiver of the International & Great Northern Railway Company against the Corporation by the payment of $1,550,000 in cash.

3. Decreasing the Preferred and Common Stock of the Corporation, actually issued and outstanding, by the purchase for retirement of any multiple of one share of Preferred Stock together with a like multiple of eight shares of Common Stock (but not less than a total of 25,000 shares of Preferred Stock and 200,000 shares of Common Stock) tendered for purchase on July 1, 1925, and thus decreasing the actually issued and outstanding Preferred and Common Stock to an amount equal to the stock now issued and outstanding less the stock so tendered for purchase, but in no event to an amount less than $1000; the purchase price of such stock to be a pro rata amount of the stock of the New Company received by the Corporation together with a sum equal to dividends, if any, received by the Corporation upon such stock.

4. Taking such further action with respect to any of the foregoing matters as the meeting may deem advisable and transacting any other business that may properly come before the meeting.

All of the powers enumerated to be exercised by my aforesaid proxies, agents and attorneys in fact, or any of them as fully and effectually as I might or could do if personally present and voting at said meeting with full power of substitution in the premises, hereby ratifying and confirming all that my said proxies, agents and attorneys in fact, or any of them, or their substitute or any of their substitutes may lawfully do by virtue hereof, and hereby revoking all former proxies and powers of attorney given by me or in the premises. If more than one of the above-named proxies shall be present and voting in person or by substitute at said meeting or any adjournment, thereof, a majority of the proxies so present and voting in person or by substitute shall exercise all the powers hereby granted.

In Witness Whereof, I have hereunto set my hand and seal this ..... day of ....., 1924.

.....(L. S.)

Note.—Any stockholder who does not desire to approve settling for $1,550,000 the claim of the Receiver of the International & Great Northern Railway Company should strike out paragraph 2 of this proxy.

The Corporation will affix the stamp required by law.

TYPICAL CASH REQUIREMENTS OF A REORGANIZED COMPANY.—The cash requirements of a reorganized company may be illustrated in the requirements under the plan or reorganization of the Atlanta, Birmingham & Atlantic R. R. Co., in 1917, which were as follows:

Obligations of receiver for equipment acquired during receivership, tax loans, claims and judgments, interest, etc.	$1,105,491.52
To retire outstanding equipment obligations issued prior to receivership, with interest	930,237.50
Legal expenses of counsel for trustees in the foreclosure of the A. B. & A. R. R., Georgia Terminal and Alabama Terminal R. R. mortgages and the sales thereunder	66,000.00
Reorganization expenses, including trustee's fees and disbursements, partly estimated	185,224.93
Compensation and expenses of Receivers' Certificates Committee in con-	

nection with the purchase and management of the properties, the organization of the new company, the negotiating of the underwriting, etc.	84,546.05
Compensation which may be allowed by the court to the receiver and his counsel	112,500.00
Commission to syndicate managers and underwriting syndicate	216,000.00
To treasury of New Company for working capital, improvements and repair of equipment ($288,000)	900,000.00
Total	$3,600,000.00

RAISING MONEY BY SALE OF ASSETS.—In 1923, the President of the American Cotton Oil Co. sent a circular to the stockholders in which there was set forth the following:

When I assumed the presidency in May, 1923, I studied the affairs of the company and as a result I recommended that the company should proceed on the basic plan of expanding the profitable end of the business and curtailing that which has proved unprofitable. In particular, I recommended to the directors that the manufacture and sale of "Gold Dust." "Fairy Soap," and other profitable products be pushed and that the cottonseed oil business be curtailed. The curtailment of the cottonseed oil business will mean that we can advantageously concentrate it into a few of our plants, rendering the balance unnecessary for our purpose. The sale of these plants will not only relieve us of the burden of superfluous assets and heavy carrying charges, but will furnish us with cash toward meeting our $8,000,000 of notes maturing next September.

SIMPLIFYING THE FINANCIAL STRUCTURE.—Reduction of capital stock is a frequent object of reorganization by agreement.

Illustration: The X. Y. Z. Co., according to its own statement as of June 30, 19—, has $1,000,000 of preferred stock and $3,000,000 of common stock outstanding. Both preferred and common shares are of $100 par value. The surplus amounts to $1,045,000, and among the assets is $1,000,000 of good-will. An audit of books made as of the same date shows obsolete properties, doubtful accounts, and valueless investments to amount of approximately $1,000,000 to be written off. Good-will, however, is left untouched. The following statement based on such valuation is submitted by accountants, showing surplus reduced from $1,045,000 to $45,000:

X. Y. Z Company

Balance Sheet as at June 30, 19—

(Before reduction of capital)

Assets		Liabilities	
Cost of Properties and Equipment, including Good-Will.	$ 4,500,000	Bonds Outstanding	$ 2,500,000
Securities Owned, of Subsidiary and Other Companies	1,300,000	Short-Term Notes	500,000
Sinking Fund Deposit	220,000	Accounts Payable	1,525,900
Cash	235,000	Notes Payable	490,000
Accounts Receivable	1,172,300	Accrued Items	31,200
Notes Receivable	1,370,000	Bond Interest, payable July 1, 19—	62,500
Material, Supplies, and Finished Parts	981,600	Dividend Declared and Unpaid	120,000
Contract Work in Course of Construction	476,300	Sundry Operating Reserves	189,000
Accrued and Prepaid Items	58,400	Indorsement on Notes Discounted	850,000
		Capital Stock:	
		Preferred	1,000,000
		Common	3,000,000
		Surplus	45,000
	$10,313,600		$10,313,600

Stockholders now decide to write off the good-will of $1,000,000 and to add $500,000 to surplus, by reducing the common from $3,000,000 to $1,500,000. Preferred stock is to remain as before.

Status after Reorganization.—The reduction in total par of common stock does not mean that the company's net worth is less than formerly, nor that a holder of stock has lost anything by charter amendment. The net worth of the company is now $3,045 000, as it really was before. Each of 15,000 shares of common stock has a book value of $136.33, found by dividing their total book value of $2,045,000 by the number of shares. The book value of preferred stock remains at $100 per share.

The financial structure of a corporation may be simplified by **cancelling good-will and patent rights** in the same manner as outlined in the previous paragraph.

In a letter sent by the American Milling Co. to its stockholders asking them to vote on a proposed reduction in the amount of capital stock, the following paragraph appeared:

> The good-will and patent rights add nothing to a solid financial basis on which to operate your property and a statement containing items of this character injures us in banking circles to such an extent that your officers are handicapped in making a proper financial showing, and in addition to this we are compelled to pay $2,800 capital stock tax per annum on this excess which would be saved to you by making the change.

REDUCING FIXED CHARGES.—One of the primary causes of insolvency among railroad and public utility corporations is that such companies may have fixed charges which are greater than their incomes can meet. In such cases the safe course in reorganization is to cut down these fixed charges by replacing a portion of the bonds with capital stock.

It has been stated that out of seven **railroad reorganizations** in the period from 1893 to 1898, every one showed a decrease in fixed charges, the average being 31%. As to **industrial reorganizations,** the results of 27 companies show that fixed charges were reduced on the average about 25%. This percentage probably measures fairly well the excessive amounts of bonded and other obligations which were issued above the limits of prudence under the old financial plan.

If the junior bondholder who is asked to accept a reduction in the principal and possibly in the rate of interest of his holdings, is at the same time given preferred and common shares up to the full par value of his former bondholdings, or perhaps a little above, he is inclined to accept the reduction much more readily. He may feel, quite properly, that there is at least a chance of his recovering in future all the capital that he has lost.

In the reorganization plan of the Virginia-Carolina Chemical Co., announced August 10, 1925, the fixed charges, including those on the floating debt, were entirely eliminated, the mortgage bonds, debentures, bank and trade debt being replaced by two classes of preferred stock and common shares in the proportions shown in the schedule following. The plan was somewhat out of the ordinary, in that it did not provide for any assessment of the stockholders. On the contrary, as the schedule shows, the first mortgage bondholders were to be partly paid off in cash. The aggregate amount of cash thus involved was to be $12,417,480 and the amount was provided from the proceeds of the sale of the stock of several subsidiary companies and other property subject to the mortgage securing the bonds. The new company was to begin without any bonded debt and any current liabilities other than certain reserves and current bills and accounts not yet due, and with approximately $19,500,000 of net working capital.

Existing Securities	Outstanding	Will Receive			
		Prior Preferred Stock	Partic. Preferred Stock	Common Stock	Cash
	$	$	$		$
1st Mortgage 7s	24,348,000	14,487,000	.....	.....	12,417,480
Each $1,000		595			510
7½% Debentures	12,250,000	.....	15,006,250	245,000 shs.	.....
Each $1,000			1,225	20 shs.	
Bank Debt	4,209,000	.....	4,882,440	84,180 shs.	.....
Each $1,000			1,160	20 shs.	
Trade Debt	963,000	.....	1,117,080	19,260 shs.	.....
Each $1,000			1,160	20 shs.	
Preferred stock (guaranteed—Consumers Chemical Corporation)	355,200	.....	442,224	7,104 shs.	.....
Each $1,000			1,245	20 shs.	
Preferred Stock	215,686 shs.	.....	.....	107,843 shs.	.....
Per share				½ sh.	
Common Stock	349,805 shs.	.....	.....	23,321 shs.	.....
Each share				1 1–15 shs.	
TOTAL		14,487,000	21,447,994	486,708 shs.	12,417,480

PRINCIPLES GOVERNING FIXED CHARGES.—In practice, experience shows the advisability of keeping in view, in the rearrangement of fixed charges, the five following principles:

1. The maximum fixed charges after reorganization should not exceed the absolute minimum of net earnings.
2. As large a proportion as possible of the charges should consist of interest on bonds. Sinking funds with their requirements, guaranteed dividends, rentals, and the like, should be avoided as much as possible.
3. The losses should fall most heavily on the junior security holders generally, leaving the first lien securities—unless the reorganization is exceedingly drastic—practically untouched.
4. The nominal value of the new securities received by security holders in old company should be reduced as little as possible.
5. Bondholders whose claims are scaled down should be given an opportunity to participate in any future increases of earnings.[13]

MODERN REORGANIZATIONS OFTEN DRASTIC.—The tendency of the present day methods of reorganization is to adopt drastic measures, if they are necessary, and to avoid half way measures. In reorganization to reduce fixed charges the tendency is toward the reduction of bond issues and the increase of the stock capitalization. This is frequently necessary to bring about effective reorganization.

The ratio of exchange of bonds for shares of stock varies with each reorganization and is governed by the exigencies of each case. **Junior bondholders** are often asked to accept in exchange for their holdings a smaller percentage of new bonds plus a certain amount of **income bonds** or **preferred stock.** The total nominal value of the new securities is generally equal to the bonds given up in exchange. The preferred stockholders are often asked to pay an assessment and surrender their old shares and receive a designated amount of preferred and common stock. Sometimes they receive preferred stock for their assessment

[13] Daggett's Railroad Reorganization.

and common stock for the preferred stock surrendered. The common stockholders are generally asked to pay an assessment and surrender their old stock for which they receive senior securities for the assessment and new stock which approximates in nominal value the shares surrendered.

PROVISIONS FOR FUTURE CAPITAL REQUIREMENTS.—Among the principal reasons for reorganizations is a provision for future capital requirements. Many corporations have from time to time, put out different issues of bonds and preferred stocks, some of which may have had conflicting claims. At times these security issues stood in the way of further financing. Reorganization may be necessary to consolidate a number of smaller issues or to replace them by a few large issues. These new issues may not alone be large enough to meet the ultimate requirements of the reorganized concerns but may carry with them provisions that additional securities may be issued as conditions may demand and outside circumstances warrant.

THE CLAFLIN REORGANIZATION.—As an interesting illustration of some of the principles of reorganizations the history of the failure and reorganization in 1914 of the great wholesale dry goods house of H. B. Claflin Co. may be briefly stated.

This company was organized in 1843. After a long period of prosperity the firm began to feel the effects of severe competition from jobbing houses in western trade-centers, and in order to meet this competition it began to build up its own retail outlets. Through certain controlled companies, particularly the Associated Merchants Co. and the United Dry Goods Co., 35 well-known department stores in various important cities were brought under the control of the Claflin interests. These stores naturally purchased most of their goods through the H. B. Claflin Co.

It is questionable whether the close relationship thus established between a wholesale house and retail stores was really valuable to either party. Of course, it enabled the H. B. Claflin Co. to carry on extensive operations for a long period; but its apparent size and prosperity turned out to be largely artificial and unsound. So far as the retail stores were concerned, it was evidently of no advantage to them to be compelled to purchase most of their supplies from a given wholesale establishment.

When the failure was first reported it was thought that the total Claflin liabilities amounted to about $34,000,000, but it soon became evident that large amounts of notes had been issued and obligations incurred of which there was no clear record. The relationships of the many companies included in the combination had become so involved that it was months before the receivers could obtain even the approximate amount of the liabilities; and in the end the total liabilities were placed at about $45,000,000.

It was found that the financial transactions of all the various department stores were being handled in New York, and that the active managers of those stores knew nothing about many of the liabilities which the treasurer of their company, sitting in his New York office, had created. For instance, the Hennessy Corporation, which operated stores in Butte and Anaconda, Montana, had on its books obligations amounting to only $83,000. The president of this company had no knowledge whatever of the existence of any other obligations; but he was suddenly advised after the receivership of the Claflin Co. that approximately $1,700,000 in notes of the Hennessy Corporation had been issued and after having been indorsed by the Claflin Co., were discounted in New York. The same practice was followed with subsidiary companies all over the country. In this way an enormous amount of "accommodation" paper was

put out. The parent company's contingent liability on this paper, however, was not shown in the financial statements it had submitted to bankers and to those who bought its commercial paper through note-brokers.

The scheme of reorganization finally agreed upon was based upon the idea that the wholesale business and the retail business of the combination ought to be separated. The *Dry Goods Economist* pointed out that, while the day was gone when a general jobbing house located in New York could do a great national business, there was still an important field open to the H. B. Claflin Company in handling business within a short distance of New York.

The plan for reorganization provided that the noteholders receive in exchange for their old notes 15% in cash and 85% in three-year collateral-trust income notes issued by the new company which was to be known as the Mercantile Stores Corporation. The Mercantile Stores Corporation was to own all the stock of the insolvent department stores in the combination, and turn these into cash as rapidly as possible. It was also provided that a new company, known as the H. B. Claflin Corporation, should continue that portion of the wholesale business which had proven profitable. All the stock of the H. B. Claflin Corporation was to be owned by the Mercantile Stores Corporation.

Under this plan the new corporations were enabled to begin their operations without any current indebtedness. The plan of reorganization was somewhat unusual in that it did not call for any new capital and at the same time freed the subsidiary corporations from current liabilities.

As far as the old stockholders of the H. B. Claflin Company were concerned, nothing was ever realized. The Mercantile Stores Corporation, however, distributed over $17,000,000 in cash to the creditors of the old company, and then having carried its liquidation of assets as far as could be done without unjustifiable losses, was reorganized in 1919 as an operating company under the title of Mercantile Stores Company, Inc. The H. B. Claflin Corporation was purchased in 1917 by, and merged with, Claflins, Inc.

OTHER REASONS FOR REORGANIZATIONS.—This section has discussed reorganizations for reasons of financial difficulties. Other reasons for reorganizations may be summarized as follows:

1. Reorganizations because of certain laws such as the monopoly laws.
2. Segregation of companies because of laws dissolving their relations.
3. Recapitalizations as preliminaries to consolidations.
4. Recapitalizations as preliminaries to refinancing.
5. Recapitalization for tax purposes.

DISSOLUTION OF CORPORATIONS.—A corporation may be dissolved, if the stockholders consent, by **complying with the proper legal procedure of the state in which the company was organized.** The various state statutes differ widely in their requirements for dissolution.

Where all the assets of insolvent corporations are sold, and the proceeds of sale have been applied towards the payment of debts, such corporations for all practical purposes are dissolved. Legally they still exist, but are merely shells and without substance, and no longer function as business entities.

SECTION 19

REAL ESTATE TRANSACTIONS

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SECTION 19

REAL ESTATE TRANSACTIONS

REAL ESTATE AND REAL PROPERTY RIGHTS.—Real estate is usually considered to be land and the buildings erected on it. It is called "property." Property, however, has two aspects, first, **the material thing** or things themselves, and, secondly, the **legal right** to possess, use and dispose of the things. The law recognizes and protects property rights. Property has also two divisions, real property and personal property. **Real property** is a technical legal term meaning any interest in land, the duration of which is measured by a life or lives, or which is to be forever. Real property rights are also called **estates.** Real property is governed by the provisions of the **Real Property Law;** at death such real property rights as survive pass directly to the heirs or devisees of the deceased. Unless there be some provision in the will, or there be a court order directing it an executor or an administrator does not handle the real property in an estate.

ESTATE IN FEE SIMPLE.—An estate in fee simple is the **largest and most important estate** recognized. It is the estate held by the ordinary owner of real estate. When real estate is bought and sold, it is this estate which is understood to be contemplated by the bargain. This estate may be defined as the right to own land and buildings in one, his heirs and assigns forever. It may be sold by the owner at any time, or devised by him under a will. It passes by operation of law to his heirs if he die without a will. There are variations of the estate known as **fee simple conditional** and **fee determinable.** The character of the first of these is that the ownership in fee shall continue as long as a condition is fulfilled; with the second, the vesting of the fee may be determined by the happening of a certain event. Practically, these two variations are little known in modern business.

LIFE ESTATES AND REMAINDERS.—When a person holds property for and during the term of his natural life only, his property right is called a life estate. The estate terminates with his death. Another person or persons must necessarily, at all times during the life estate, have the right to obtain the property on the death of the life tenant. This right is that of remainder and the one owning it is the **remainderman.** When the remainderman finally receives the property, his estate is said to **vest in possession,** and he has then an estate in fee simple. All remainders are not the same. There are some under which a person or persons, or a designated class of persons, or the legal representatives of such persons, will with certainty get the property; they are **vested remainders.** Other remainders may depend upon the happening of an event; that is, they are **contingent** upon such event. Thus a grant to A for life, then to B if living, but if B be not living, then to C, gives C a **contingent remainder.**

DOWER.—In New York and most of the other states, a man's widow has what is called a dower right in his real property. This right attaches to all

eal property owned by the husband at the time of the marriage, or that he may acquire during the marriage. Dower becomes effective at the husband's death, and gives the widow the **use of, or income from, one-third of his real property** for the remainder of her life. It ceases with the widow's death. It is because of dower that a wife's signature is required when real property is acquired by deed from a married man, or when money is loaned to him on a mortgage. Dower can at any time be released to a third party, but the usual rule is that it cannot be released to a husband except by a prenuptial agreement.

CURTESY.—When it is allowed by law, curtesy is the life interest of a husband in all real property owned by his wife at her death, which she has not disposed of by will. A woman during her life may sell property, conveying it by her signature only, and in a similar manner, may mortgage her property. She may also dispose of her property by will without reference to the husband. There is an additional feature of curtesy in that there must have been children born alive of the marriage. The rule stated is that of New York State. Curtesy has been abolished in some states, and some have different rules regarding it.

JOINT ESTATES.—The fee simple estate is sometimes held by two or more persons at the same time, as when a man dies and leaves his real estate to his several children. All of the children own it at the same time. Each child is said to own an undivided interest, and they own it as **tenants in common.** If there are two, each owns an undivided one-half interest; if three, an undivided one-third, and so on. These **undivided interests** may be conveyed; at death they pass to the heirs and devisees of the respective owners. It is sometimes provided that these several persons shall own as **joint tenants,** and not as tenants in common. The feature of a joint tenancy is survivorship. When one of the joint tenants dies, the survivor or survivors get his share. A joint tenant cannot dispose of his interest by will, but he may convey it by deed during his lifetime. Such action breaks the joint tenancy as to the grantee's share. Unless it is the clear intention to create a joint tenancy, the law will assume a tenancy in common. The ownership of a piece of property by husband and wife is as **tenants by the entirety.** Neither party acting alone can convey or otherwise alienate any interest in the property. The survivor of the two becomes the sole owner of the property in fee simple.

CLAIMS AFFECTING REAL ESTATE.—There are many claims or rights of creditors which affect real property. When the right of a creditor is such that he can sell or require the sale of the debtor's real estate, the right is called a **lien.** The **principal liens** are—mortgages, judgments, mechanic's liens, taxes and assessments, decedent's debts and inheritance taxes.

Mortgages.—When money is borrowed on real estate security, the lender obtains two instruments, one is a bond or note, and the other a mortgage. The **bond or note** is the evidence of the debt with a promise of repayment, together with interest provisions; the **mortgage** is the transfer of the title of certain real property as security for the debt. In most states the mortgagee does not get actual title, merely having a claim or lien upon the property. Because of his lien the mortgagee can cause a sale of the property in the event of a default in the payment of the debt. More complete information regarding mortgages is given in other parts of this section.

Judgments.—A judgment is a determination of the rights of parties by an action at law. Judgments which are liens on real property are, of course, **money judgments.** After the judgment is obtained it is docketed; that is, it is made a matter of record in the office of a public official. In New York judgments become a lien on real estate when they are docketed, and the **lien continues for**

10 years from the date of the judgment. A sale of the property is effected by delivering **a writ of execution** to the sheriff, who thereupon, after proper advertising, sells all the right, title and interest of the debtor in whatever property the sheriff can find. The judgment is a lien on all property, both real and personal, which the debtor may own, but in selling under execution of a judgment, the sheriff does not search the title to the property he sells, and, consequently, can sell only such rights as the debtor may have. The sheriff does not deliver a deed to the successful bidder until eighteen months after the sale. In the meantime the **owner and subordinate lienors** have the right to redeem the property from the sale. As judgments are sometimes reversed on appeal, they can be bonded, and filing a bond approved by the court frees the property from the lien. Upon payment of a judgment, a satisfaction piece should be obtained and filed so that the record may be cleared.

Mechanic's Liens.—Those who perform labor or furnish material for the improvement of real property are entitled by law to hold the property for the amount of their claims. They have a lien on the property known as a mechanic's lien. The statutes of the state in which the property is located set forth in detail the character and extent of the lien, and how it is obtained, enforced and discharged.

The Mechanic's Lien Law of the State of New York (Chapter 33, Consolidated Laws) may be used as an illustration. It must be emphasized, however, that the laws of other states differ in important respects. Under the New York law the mechanic or material man files a notice in the office of the clerk of the county in which the property is located. This notice must contain the essential facts of the claim and a description of the property against which it is filed. The filing must be within 120 days of the date upon which the last labor was performed, or the last material furnished. The lien is subject or subordinate to all prior liens of record against the property. It continues for one year from the date of filing and then expires. In order to sell the property to enforce the lien, a legal action known as a **foreclosure,** must be conducted. The owner of the property may contest the action and offer a defense, in which case the issue is tried in court. If the result of the action is a judgment for the lienor, a sale of the property is had, subject to the prior liens. The proceeds of the sale, after taking out costs and disbursements, are applied to the lienor's claim.

Often when one mechanic's lien is filed against a piece of property, a number are filed, especially where several contractors have been engaged in the improvement. Under the law there may not be separate actions on each lien, but the first action brought brings in the other lienors. There is one sale, and the liens are marshaled in order of filing, and the proceeds of the sale used to pay them in their proper order. An owner of property upon which a mechanic's lien has been filed may wish to have the claim disposed of quickly; he may not wish his property encumbered by a lien. He may, under the law, notify the lienor that he must start his action within 30 days, and he can, if he so desires, bond the lien or deposit the amount of it in cash with the county clerk. The bond or the deposit of money serves to free the property from the lien.

In order to better enable mechanic's lienors to realize on their claims, the New York law provides that if the holders of 75% in amount of the liens come to an agreement, they can borrow money on a trust mortgage in order to finish the work under construction. All of the mechanic's liens become subordinate to the mortgage thus made. On completion of the work the same percentage of lienors can agree to a sale of the property, the proceeds of which are used to pay the lienors' claims. Such sale would, of course, be subject to any prior

mortgages, or other liens, including the mortgage made by the lienors themselves to obtain the money to finish the construction work.

The amount of a mechanic's lien is the amount due on the contract, or in the absence of a contract or agreement, the reasonable value of the work performed or material furnished. Sub-contractors may file liens, but their claims, being not directly against the owner, can be enforced only for the amount due by the owner to the general contractor under the terms of the contract between them. Care should be exercised by an owner not to anticipate payments to a general contractor, for in the event of an action by a sub-contractor on a mechanic's lien, the owner may be required to pay again the amount of the anticipated payment.

Decedent's Debts.—When a person dies, his property passes either by will or by operation of law to others. The creditors of the deceased have a claim, however, against all the property in the estate, both real and personal. This claim has the character of a lien, for the creditors can compel a sale of the property if the debts are not paid. The debts of the decedent are paid out of the personal property in the estate as far as it will go; if insufficient, recourse is had to the real property. Proof of payment of debts is usually required when title to property comes through a decedent's estate.

Inheritance Taxes.—The federal government, and most of the states, impose an inheritance or estate transfer tax. These taxes are liens on the real and personal property in the estate, and payment must be made before clear title to the property can be given.

Corporation Franchise Tax.—The State of New York and many other states tax corporations annually for the privilege of doing business in the state. The tax may be based upon the net income of the corporation, its capital stock, or the amount of capital employed within the state. The tax can be enforced against the corporation and its property can be held for its payment. In closing real estate titles in New York it is customary to write to the Tax Department in Albany to ascertain the standing of the corporation with relation to its franchise taxes.

Conditional Bills of Sale.—A conditional bill of sale is an agreement for the sale of an article of personal property containing a provision that the title to the property shall remain in the vendor until the purchase price is paid. If the articles are to be used in the improvement of real property, the conditional bill of sale will prevent them becoming part of the real property until the condition is disposed of. The New York law requires that in order to give notice to others the conditional bill of sale must be filed in the register's or county clerk's office at or before the time of the delivery of the goods to the premises.

Other Encumbrances.—There are claims, rights and interests involving real property which are not in the nature of liens but whose existence must be recognized. They often constitute real objections to the passing of a title and are reported in the results of a title search. Restrictions, easements, and encroachments are encumbrances and are explained in connection with contracts. Municipal zoning regulations, orders of governmental department and violations of rules and ordinances should also be considered, although often not encumbrances in a legal sense.

Taxes, Assessments, and Water Charges

TAXES.—Taxes may be defined as a regular proportional and enforced contribution to the support of government. Taxes on real estate become liens

on the property affected on the day the taxes become due and unless paid will eventually result in a sale of the property. Interest and penalties accrue if payment is not made within a specified time.

TAX LEVIES.—Taxes may be levied at various times during the year, and for several purposes, as for instance, there may be a school tax, a state, town and county tax, a village tax, etc. In New York City taxes are levied in one amount but are due in two installments, the first half on May 1, and the second half on November 1 of each year. Taxes must be levied in a legal manner, that is to say, there must be notice to the property owner and an opportunity for him to be heard. The tax levy becomes a lien on all property affected by it, and a tax search is always made when purchasing real property, or making loans on it. Owners should see that the taxes on their property are paid as they become due and mortgagees should have searches made in order to preserve the mortgage lien.

MUNICIPAL BUDGET.—In the consideration of taxes and the method in which they are levied, it may be observed that there are several important steps. The first of these may be considered to be the budget. The budget is the estimated amount to be spent by a governmental authority within a certain period of time. New York City makes up its budget on or before December 25. From the budget is deducted the estimated amount of city revenues, and the balance represents the amount that must be raised by taxation. The greater part of this amount consists of a levy on real property.

ASSESSED VALUATION.—The second important step in levying taxes is to determine the assessed valuation of the property to be taxed. New York City will be used as an example. Each of the five boroughs of the city is divided into sections and a deputy tax commissioner assigned to each section. Every parcel of real property is mapped and listed, and the duty of the deputy commissioner is to value each one of these parcels separately. In making these valuations he considers the **land value** first. To this he adds the amount that the **building value** adds to the land value. This second figure may be the actual cost to reproduce the building; but in the case of old buildings, or obsolete buildings, or buildings that are not the proper improvement for the land, it may be a much smaller figure. The report of the deputy commissioner is made showing first the land value, and then the land and building together. This total can, of course, not be more than a fair market value of the property.

TAX RATE.—Having the budget, or amount to be raised by taxation, and the total assessed valuation of the land to be taxed, the first figure divided by the latter will give the tax rate, and the tax rate applied to the valuation of any particular parcel gives the taxes charged against that parcel. The Board of Aldermen of New York City fix the tax rate on March 3 of each year. The tax rolls are thereafter delivered to the Receiver of Taxes who computes the amount of tax for each parcel of real estate.

REVIEW OF ASSESSED VALUATIONS.—Since the amount to be raised by taxation cannot be changed, the only chance for the property owner to have his taxes reduced is to have the commissioners lower the assessed valuation. If, when the assessment rolls are made up, he finds that the value placed against his property is, in his opinion, too high, he has an opportunity to protest and be heard by the commissioners in the matter. His complaint may be on the ground, either, that it is **inequitable,** that is to say, higher than similar property, or that it is **excessive,** that is, more than it is really worth. He may present facts that will result in the commissioners reducing his valua-

tion. If they refuse to make the reduction, he may carry the matter higher by legal action known as a **proceeding certiorari.**

ASSESSMENTS FOR PUBLIC IMPROVEMENTS.—Assessments must not be confused with assessed valuations. Assessments are charges by the public authorities for the purpose of paying the **cost of some improvement.** They are levied once for all, and on a certain date become a lien on the property affected. In New York City assessments become liens on the property 10 days after being entered in the assessment record books, and bear interest if not paid within 60 days after becoming liens.

How Assessments Arise.—A municipality, or other governmental authority, may under its **right of eminent domain** take property for public purposes. This often involves a **condemnation proceeding.** The result of the proceeding is to award damages to the owners of the property taken. The proceeding also, in some cases, levies the total cost, that is to say, the amount of the awards together with expenses, as an assessment on the property benefited. The court will fix the area of assessment and the basis upon which the amount of the assessment against each parcel benefited is levied. **Local improvements,** such as sidewalks, curbs, paving and sewers, do not involve a legal proceeding. Public authorities, such as a board of assessors, figure the total amount of the cost of the improvement and mathematically apportion it among the parcels of property benefited by the improvement. The improvement that causes the assessment to be levied is made by the municipality after due notice and letting of contracts and inspection of the work. Proper legal procedure must be followed throughout.

Installment Assessments.—Assessments for improvements frequently are of large amounts and are, therefore, burdensome to property owners. In order to relieve this burden the assessment may be spread over a period of years and the assessment is levied by the authorities as an installment assessment. There are other assessments that are levied in one amount but which may be converted into 5 or 10 year or more annual installments at the request of the property owner. The deferred portion of all installment assessments bears interest. The installments become liens on their anniversary dates, and if not paid when due additional interest is charged.

WATER CHARGES.—Water is a commodity and is frequently furnished by a private company, in which case the charge does not become a lien on the property. If furnished by a municipality the charge does become a lien and will be enforced against it. There are **two methods of computing charges for water.** One is a **flat rate per annum** usually computed on the amount of frontage of the house on the street, taking into consideration the water outlets within the house; the other is a charge based on **actual consumption as registered by a meter.** In New York City the frontage charge becomes a lien on January 1 of each year. Meter charges become liens, as the meters are read by the inspectors from the Water Department, the charge at that time being entered on the books and bills sent to the owners.

ENFORCEMENT OF THE LIEN OF TAXES, ASSESSMENTS AND WATER CHARGES.—There have been several methods in use for the enforcement of tax arrears. This may be in the form of a **sale of the property,** or the **sale of a lease on the property** for a period of years, or the **sale and transfer of a tax lien** on the property. The last method is the one provided by law in New York City at the present time, and is probably the most effective way for the collection of the arrears when the property affected is of any appreciable value. Under this system the City, at regular intervals, makes up a list of

taxes, assessments and water rates unpaid and in arrears for a specified time. The total amount of arrears against any parcel, together with interest, and a small charge for costs, constitutes the total tax lien. A public auction is held at which the liens are sold to the person or persons bidding the lowest rate of interest. The maximum interest rate that may be paid is 12%. In other words, if the arrears of taxes amount to $1,000 and the city is selling a tax lien of that amount, it would be put up at the auction, and the first bidder may offer to buy it at 12% interest. Another offering to buy it at 11% would get it, unless someone else offered to buy it at a still lower rate. An instrument known as a **certificate of transfer of tax lien** is delivered to the successful bidder and he then has a first lien on the property for the amount he paid the city bearing interest at the rate he bid. It runs for 3 years with the interest payable semi-annually. It **may be foreclosed** for non-payment of interest, for non-payment of subsequent taxes or assessments, or for principal at the end of 3 years. The foreclosure is similar to that of a foreclosure of a mortgage.

TAX SEARCHES.—In many localities taxes appear on the collector's books in the name of the owner of the property, and searches have to be made against those names in order to ascertain unpaid taxes. This is inaccurate and often makes searching difficult and the results uncertain. The **block and lot system** in use in New York City and other places is considered to be more effective. Under this system all property within the jurisdiction is mapped, divided into blocks, and the blocks into lots. The lots are not of any given size, but rather represent a unit of ownership. In making tax searches, a description of the property is compared with the maps in the Tax Department. These maps will show the section, block and lot by which the property is known on the tax records. All charges for taxes, assessments and water rates are listed with respect to lot and block number, and a search is readily and accurately made.

Contracts for Purchase or Sale of Real Estate

NECESSITY FOR CONTRACT.—The ownership of real property differs from personal property in one very important particular; **ownership of personal property** is evidenced almost entirely by possession, while **ownership of real property** is evidenced by **possession** together with **title,** i.e., the chain of instruments (deeds, mortgages, etc.) on the public records which indicate who owns the property and the liens and encumbrances upon it. Consequently, while personal property may ordinarily be transferred by mere delivery, the conveyance of real property involves not only the transfer of possession but the search, by the purchaser, of the public records to ascertain that the seller has proper **title.** Such title examination requires some time. There has, therefore, arisen the manner of selling real estate by means of contract, enabling the purchaser to bind the bargain but avoid paying more than a deposit until he has had opportunity to examine the title.

The agreement to sell real estate is governed by the same rules of law which affect every contract, namely, there must be competent parties, offer and acceptance, legal consideration, and subject matter. There is the further provision that contracts for the sale of real estate **must be in writing** and signed by the party to be bound. This means practically that contracts for the sale of real estate must be signed by both parties. The contract is usually prepared in duplicate and one copy taken by the seller and the other by the purchaser.

IMPORTANCE OF CONTRACT.—Too much emphasis cannot be laid upon the importance, not only of having a written contract, but also upon its pro-

visions. In addition to the legal requirement that the contract be in writing, there is the practical reason that there are usually many details agreed upon, and a failure to reduce these to writing would result in many disputes as to what was actually agreed upon. Then, too, it must be borne in mind that **the essential part** of the entire transaction is **the contract.** The closing of title, delivery of deed, manner of apportioning rents, taxes, etc., are governed entirely by its provisions. All negotiations are deemed to be merged in the contract. Nothing may be added to it. It is, therefore, necessary that care be taken to state in the contract everything agreed upon.

FORM OF CONTRACT.—Slightly varying forms of contract are used in the different states. In general, however, any form of contract contains six general divisions:

1. Statement of parties
2. Description of property
3. Liens and incumbrances
4. Financial statement
5. Closing date and place
6. General stipulations

In certain states, notably California, there is coming into use a **three-party form of contract of sale,** comprising the buyer, the seller and a trustee. This form is used so that the deposit on the contract may be held in escrow until the title is closed. It prevents the seller receiving any money until the validity of his title is assured. Its chief objection is that, since the broker's commission is due on the signing of the contract, the seller is compelled to advance the commission from other funds.

STATEMENT OF PARTIES.—The names of the buyer and seller are usually stated in the contract, though that is not necessary, provided they sign the contract. An **infant** is not bound by his contract to sell and may recover or retain his real estate even if he has received the consideration and spent it. **Persons of unsound mind** are not bound by their contract. The question of competency seldom arises with regard to infants or insane persons as a practical matter. There is, however, one class of persons whose competency must always be examined, that is, **persons acting in a fiduciary capacity,** such as attorneys in fact, executors, and trustees. A purchaser, before contracting to purchase property from such a fiduciary, should always make sufficient investigation to satisfy himself that the fiduciary has authority to sell the property for the price and upon the terms agreed upon, otherwise the fiduciary has no authority to contract.

DESCRIPTION OF PROPERTY.—The property to be transferred should always be described with sufficient particularity to permit of absolute identification of the property. It is not needful that the description be drawn with as much particularity as the description in the deed, for the reason that the contract will be carried out within a short period of time, while the deed must identify the property forever. Consequently, it is often satisfactory to use a description by street number in the contract because the building will probably not be destroyed and so completely obliterated as to prevent identification within the contract period. In a deed, however, such a description should not be used as complete removal of the building might in later years create a question as to the exact location of the property.

The **usual methods of describing real estate** are: (1) metes and bounds, (2) monuments, and (3) map.

Metes (distance) and bounds (direction) is the usual method of describing city property. That form of description is used in the contract reproduced on page 1037. A description by **monuments** makes use of the physical features of the terrain to identify the boundaries of the property. For a specimen

see page 1039 where a farm is diagrammed and then described by monuments. Both the foregoing types of description have for their purpose the identification of the property by going around it. Special care must be exercised by the seller to describe no more than he owns and by the purchaser to see that the description includes all he intends to buy. Monuments are **always dangerous** for the reason that physical features—trees, fences, water courses and the like—are apt to disappear or change. A metes and bounds description is more desirable, but if the data is unavailable and monuments must be used, try to select such as will be most permanent. Very often a combination of the two methods of description is used. In fact, wherever in a metes and bounds description reference is made to a line running through a wall or to the centre line of the block, monuments are being used.

The **description by map** is used usually in suburban areas which are being developed. A tract is acquired and a surveyor makes a map indicating roads and lots. This map is given a title and filed in the office of the county clerk or register of the county in which the tract is located. The various lots are designated on the map as is also each block. The tract is then physically opened by indication on the ground of the streets (which may or may not be physically prepared) and the lots are usually staked off. When a lot upon such a development is transferred, it is customary not to describe it by metes and bounds, but rather to describe it by reference to the map. This is done by a form of description which designates the map and then refers to the lot or lots and the block in which they are located; for example, all that certain lot known and designated upon a certain map entitled "Map of property of James Brown, at Ocean View, Nassau County, New York" surveyed June 1, 1924, by William Smith, Civil Engineer and Surveyor and filed in the office of the Clerk of the County of Nassau, as and by the lot numbers 10, 11 and 12 in block B.

Statement of Liens and Encumbrances.—It should always be remembered by the seller that his duty under the contract is to give a title free of all liens and encumbrances except such as may be excepted by the contract. Consequently, any such as exist and subject to which the property is to be sold, must be made known to the purchaser and inserted in the contract. In like manner the purchaser should scrutinize the liens and encumbrances mentioned in the contract to be sure they do not jeopardize his ownership or use of the property. These matters are usually inserted in the contract after the description, though several are mentioned at other places. Brief scrutiny may be given the liens and encumbrances most usually mentioned.

Tenancies.—The rights of tenants should always be mentioned in a contract, this for the reason that unless they are mentioned, the seller can be compelled by law to deliver an empty house. He is sufficiently protected if he merely states that the premises are sold "subject to the rights of tenants." The purchaser, however, is buying the property relying to a considerable extent on its present earnings. He has been told in the negotiations that the rents are a certain amount. He would probably not be willing to purchase the property if the rents were considerably less than the amount stated to him. He also may be relying considerably upon the length of term of the various tenancies. He, therefore, should insist that the contract state not only that the premises are sold subject to rights of tenants, but should have inserted in the contract the details of the rent and length of term of each tenancy.

Restrictions.—Restrictions may and often do very greatly **affect the value of property.** If the restriction is a **set back,** it prevents more than a certain amount of the lot being built upon. If it is a restriction as to use it may greatly

decrease the earning power of the property. Other types of restrictions will affect the desirability of the property. If the purchaser is acquiring an **unimproved lot,** he is concerned for the reasons just stated. If he is purchasing **improved real estate,** he should desire to know that there are no restrictions which are violated by the existing structure and its present use. The seller, if there are restrictions on the property, should state them in the contract without fail, as otherwise he is undertaking to deliver a title which he cannot, since he cannot give title free of the restrictions. The purchaser should see to it that the restrictions where stated are stated with sufficient particularity so that he may know what he is purchasing—if unimproved property, something upon which he can build what he has in mind; or if improved property, that he can continue its present use.

Zoning Restrictions.—In New York and many other cities the municipal authorities have laid out various zones in which the use of premises are restricted. These restrictions usually apply to height of building, use of building, or area which may be built upon. Such zoning restrictions are a serious matter to the purchaser. They are equally serious to the seller, for if he fails to mention them, he is undertaking by his contract to give a title which he cannot make good. The purchaser on his part should either know exactly in what zone the property is located or else have the contract state it definitely.

Easements.—Easements may be defined for practical purposes as certain rights to which one piece of property is entitled as against neighboring property, such as the right to have a party wall continue to stand partly on each piece of property, and driveway easements. In large cities, where land is quite valuable, it is often desirable to have one driveway between two buildings serving the garages at the rear of the lots. Each garage will stand upon the land of its owner. The driveway will be equally upon each lot. This gives each owner an additional 3½ or 4 feet, since instead of each owner having a 7 or 8 foot driveway, one driveway serves both. If such an easement is created, neither owner can, without consent of the other, sell the property except subject to the neighbor's right to the continuation of the driveway easement. Consequently, the seller, in such circumstances, would be unable to give good title unless he stated in the contract that the premises are sold subject to the easement. Of similar nature and effect are the consents which may have been given by the seller or previous owner of the property for trolley, subway and elevated railroad use of the street, maintenance of gas, electricity and telephone lines under or over the property.

Survey Variations.—Buildings, fences and other structures often fail to stand exactly on the boundary line of property. Occasionally the man who is selling his property is in the position where either he encroaches on his neighbor or his neighbor encroaches upon him. Either of these situations may make the title unmarketable, in which event the seller cannot carry out his contract unless he has stated in the contract the fact that he is selling the property **"subject to any state of facts an accurate survey may show."** While this protects the seller, the purchaser should see to it that he either knows the exact situation by having examined the survey, or else have the contract state the exact nature of the variation so that he may decide before signing the contract whether or not he wishes to buy the property in that condition.

Installment Assessments.—Wherever real estate is benefited by a local public improvement, some part or all of the cost of the improvement is levied as an assessment against the various pieces of real estate benefited. Such assessments are liens upon each piece of property. It is the seller's duty,

except where otherwise agreed, to pay all such assessments as exist at the time the title is transferred. Occasionally such assessments, when large in amount, are apportioned over a period of years, being what are known as "installment assessments." The contract, to protect the purchaser, particularly where the premises are in a developing neighborhood, should contain a provision under the terms of which the seller binds himself to pay all future installments of any such assessment.

Departmental Violations.—In New York and many other cities there are various departments which have jurisdiction of the use and erection of buildings. These departments have the right to enforce their orders, but their orders are not liens against the property until some legal action is taken by the municipality. This creates a peculiar situation. There may be orders issued against the property which will cost considerable money to carry out. If the owner sells the property without carrying out the order and before any legal action has been taken, he is able to give a marketable title and compel the purchaser to take it. Yet the order continues and the purchaser will be compelled to carry it out. It is for this reason that contracts often, in order to protect the purchaser, contain a provision which states in substance that all notices, orders and violations of any municipal department shall be considered as liens and be removed by the seller.

Personal Property.—The description of a piece of land in a contract by implication obligates the seller to deliver not only the land but all **buildings and fixtures** thereon erected; this by reason of the rule of law which states that anything definitely and permanently fixed to the land or the building is considered as part of the land. There are, however, many articles about which question might arise. In order to avoid dispute it is customary to insert in the contract a provision stating that all personal property used in or appurtenant to the premises is included in the sale.

FINANCIAL STATEMENT.—The financial statement in the contract may take **four parts:** (a) deposit; (b) cash on closing; (c) existing mortgage or mortgages; (d) purchase money mortgage. The deposit and cash on closing are present in practically every contract. The remaining two parts may or may not be present depending upon whether there is an existing mortgage or mortgages, subject to which the property is sold, and whether or not the parties have agreed upon a purchase money mortgage.

The **amount of the deposit** is not fixed by law, but normally will be from 10% to 15% of the total price. The amount of cash on closing will be the balance remaining after deducting from the price the total of deposit, existing mortgage, and purchase money mortgage. It is customary for the deposit on the contract to be paid on the signing of the contract in cash or uncertified check. There is no necessity for a certified check in view of the fact that title does not then pass to the purchaser. It is usual to provide that the payment on closing be made in cash, although at the time of closing it is customary to accept a certified check.

As to the **existing mortgage,** there should be a statement with some particularity of the amount of said mortgage, the date the principal becomes due, the interest rate, and the dates when interest is payable. The contract should also provide for, not only the amount of the purchase money mortgage, but its terms—the date of payment of principal or installments thereof, the interest rate and the interest payment dates. Customarily it is provided that the **purchase money bond and mortgage** be drawn by the seller's attorney and that the purchaser pay the expense, i.e., cost of drawing the bond and mortgage,

mortgage tax, if any, recording fees and internal revenue stamps on the bond. The contract also often provides for special clauses in the purchase money mortgage, such, for instance, as the subordination and lifting clause, and the default in prior mortgage clause. The **subordination and lifting clause** has the effect of reciting that the purchase money mortgage is subordinate to whatever prior mortgages there may be and provides that the purchase money mortgage shall remain subordinate to any renewal or replacement of the prior mortgage. The default in prior mortgage clause permits the holder of the purchase money mortgage to foreclose his mortgage should the purchaser or later owner of the property default in any of the terms or conditions of the prior mortgage or mortgages. This is an important clause, as it makes it possible for the holder of the purchase money junior mortgagee to keep the holder of the prior mortgage quiescent while he (the holder of the junior mortgage) is foreclosing his own mortgage, thereby avoiding the necessity of refinancing the entire property which would happen if the prior mortgage were foreclosed.

CLOSING DATE.—It is customary to state in the contract of sale a date upon which title shall be closed. By this is meant the date upon which the **final payment** shall be made and **a deed delivered** by the seller to the purchaser, who then becomes entitled to possession of the property. The date set is usually sufficiently after the date of the contract to permit of examination of the title by the purchaser. This period is usually from 30 to 60 days. Contracts for the sale of real estate are not considered by the courts as being contracts in which time is of the essence. Consequently, even though the contract fixes a time and place of closing, either party may, upon reasonable excuse, demand an adjournment of closing. If it is desired to prevent this, it may be done by inserting in the contract the stipulation that "time is of the essence of this contract," or similar words. It should be borne in mind, however, that even though either of the parties may be entitled to an adjournment, nevertheless, when the title is finally closed, it may be closed as of the original closing date should the other party desire it. Normally in the sale of improved property, if the adjournment has been secured by the seller, the purchaser will insist upon the title closing as of the original date. This is for the reason that the rents usually will exceed the carrying charges.

GENERAL STIPULATIONS.—In addition to the provisions of the contract which have already been discussed, there are certain other general clauses which usually are inserted. Since it is impracticable for the seller to collect rents and pay charges up to the exact date of closing title, it is usual to provide for an adjustment of such running items as **rent, interest on mortgages, insurance premiums, taxes and water charges.** A reference to the subsection on "Closing of Title" will indicate just how this purpose is accomplished. The contract binds the seller not only to deliver possession but to convey the title by preparing, executing, acknowledging and delivering, at his own expense, a deed in proper form to convey the fee title to the purchaser. **The deposit is made a lien** upon the specific real estate described. This is of great value to the purchaser in enforcing his rights upon a default. He may seek relief from the property directly, without the circuitous method of suing the seller and then enforcing his judgment against the property. In order to avoid any question as to who shall carry **insurance** pending the closing of title, it is usual to provide that the seller, who already has insurance, shall carry the risk until the title closing. The contract should, by a clause inserted, bind the successors and assigns of the parties. In this way, even if a party die, his heirs or legal representatives may be compelled to carry it out. The **brokerage clause** is usually

included in the contract. It is not a necessary part. The purchaser seldom agrees to pay the broker; his agreement is with the seller. The only object of the provision is to prevent the seller from later denying the broker's employment and accomplishment.

EXECUTION OF CONTRACT.—The execution of the contract of sale may involve **four acts,** namely, signing, sealing, witnessing and acknowledging. The instrument must be **signed.** This is generally accomplished by having buyer and seller each sign both copies of the contract. Each then keeps a copy bearing both signatures. The instrument **need not be sealed.** The only practical effect of sealing at the present time in New York State is that the statutory period of limitations to bring action upon the instrument is greater than upon an unsealed instrument. Until recently the seal was held to prohibit either party from considering the other as a dummy and going behind the dummy for relief, in the event of default, against the undisclosed principal. That rule of law has been abrogated in New York, though it is still the law in many states. The instrument **may be witnessed,** although that is not necessary. It is, however, customary to have one or two witnesses sign their names as such. The instrument **need not be acknowledged** and in fact seldom is acknowledged. Occasionally the purchaser desires to record the contract. If that is to be done, the parties must acknowledge their signatures and the **certificate of acknowledgment** be attached to the instrument.

NON-PERFORMANCE.—In the event of non-performance of the contract, certain rights and obligations arise as between the parties. **If the purchaser default** in the contract, he is subject to the ordinary rules of law that he may be held to pay any damages for the loss of the seller's bargain; that is, the difference between what the property was actually worth and what the purchaser had agreed to pay for it. As to the **seller,** the law differs somewhat from the ordinary contract. The seller is undertaking to give title. Title at the best is a conjectural matter. The seller may think he has a marketable title but some error may have been made in previous examination of the title, or there may be discovered some flaw of which he had no knowledge, such as a forgery. The law, therefore, looks more leniently upon the seller than upon the purchaser. If the seller fails to carry out his contract because of the fact that his title is bad without his knowledge, the law will not compel him to do more than refund the deposit and pay the purchaser's legitimate expenses for the examination of the title. If, however, the seller either knew that his title was bad or should have known it, or willfully refuses title, then the law compels him to pay the purchaser's damages for loss of the bargain, namely, the difference between the purchase price and the actual value of the property. Legal advise should always be sought before any step is taken. It is well, however, to bear in mind that the purchaser should never serve notice on the seller that because of the seller's failure to carry out the contract the purchaser considers the contract cancelled. This step is very often taken before securing legal advice. Its result is disastrous to the purchaser for the reason that he thereby waives the right to enforce his lien upon the property for the amount of the deposit and his expenses.

CONTRACTS FOR EXCHANGE.—In the contract of sale one party has agreed to deliver real estate, the other party has undertaken to give money or promises (mortgages), or both. Occasionally the parties wish to exchange real estate either on an even valuation, as to equity above mortgages, or with additional cash. In such a case the contract of exchange is used. The following

shows the form of exchange contracts used by the title companies in New York City.

Form of Contract for Exchange of Real Estate

AGREEMENT, made and dated , between

hereinafter described as party of the first part, and

hereinafter described as party of the second part, for the exchange of real property.

WITNESSETH, as follows:

The party of the first part, in consideration of one dollar, the receipt of which is hereby acknowledged, and of the conveyance by the party of the second part hereinafter agreed to be made, hereby agrees to sell, grant and convey to the party of the second part, at a valuation, for the purpose of this contract, of

Dollars,

ALL that land with the buildings and improvement thereon, in the

The premises which are to be conveyed by the party of the first part shall be conveyed subject to the following encumbrances:

The party of the second part, in consideration of one dollar, the receipt of which is hereby acknowledged, and of the conveyance by the party of the first part, hereinbefore agreed to be made, hereby agrees to sell, grant and convey to the party of the first part, at a valuation for the purpose of this contract, of

Dollars,

ALL that land with the buildings and improvements thereon in the

The premises which are to be conveyed by the party of the second part shall be conveyed subject to the following encumbrances:

The difference between the values of the respective premises, over and above encumbrances, for the purpose of this contract, shall be deemed to be

Dollars, and that sum shall be due and payable as follows, by the party of the

The deeds shall be delivered and exchanged at the office of

at o'clock on 19 .

It is agreed by the respective parties hereto that

brought about this exchange and that the brokerage shall be paid as follows:

Encroachments of stoops, areas or cellar steps if any, upon any street or highway.

Each of the parties shall give and each of the parties shall accept a title such as the Title Guarantee and Trust Company will approve and insure.

Rents and interest on mortgages, if any, are to be apportioned, and the risk of loss or damage to the premises by fire, until the delivery of the deeds is to be borne by the respective sellers.

If there be water meters on the premises, the respective sellers shall furnish readings to dates not more than thirty days prior to the time herein set for closing title and the unfixed meter charges for the intervening time shall be apportioned on the basis of such last readings.

All personal property appurtenant to or used in the operation of said premises is represented to be owned by the respective sellers and is included in this exchange.

This contract covers all right, title and interest of the respective sellers, of, in and to any lands lying in the bed of any street, road or avenue, opened or proposed, in front of or adjoining the premises to be conveyed to the centre line thereof, and all right, title, and interest of the respective sellers in and to any awards made or to be made in lieu thereof, and in any award for damage to said premises by reason of change of grade of any street; and the sellers will execute and deliver to the purchasers, on closing of title, or thereafter, on demand, all proper instruments for the conveyance of such title and the assignment and collection of such awards.

If there be a mortgage on the premises and such mortgage has been reduced by payments on account of the principal thereof, then the seller agrees to deliver to the purchaser at the time of delivery of the deed a proper certificate executed and acknowledged by the holder of such mortgage and in form for recording, certifying as to the amount of the unpaid principal sum of such mortgage and rate of interest thereon, and the seller shall pay the fees for recording such certificate.

All notes or notices of violation of law or municipal ordinances, orders or requirements noted in or issued by the Tenement House Department, Fire Department, Building Department, Department of Water Supply, Gas and Electricity, or any other State or Municipal Department having jurisdiction, against or affecting the premises at the date hereof, shall be complied with by the seller and the premises shall be conveyed free of the same, and this provision of this contract shall survive delivery of the deed hereunder. The seller shall furnish the purchaser with an authorization to make the necessary searches therefor.

Subject to Building Restrictions and regulations contained in a resolution or ordinance adopted July 25, 1916, by the Board of Estimate and Apportionment of the City of New York, and amendments and additions thereto now in force.

Each of the parties agrees to convey the property hereinbefore described as sold by such party respectively, free from all encumbrances, except as above specified, and to execute, acknowledge and deliver to the other party, or to the assigns of the other party, a deed in proper statutory short form for record containing the usual full covenants and warranty, so as to convey to the grantee the fee simple of said premises free from all encumbrances except as herein stated. The deed, in each case, shall be drawn at the cost of the party of the first part thereto.

The stipulations aforesaid are to apply to and bind the heirs, executors, administrators, successors and assigns of the respective parties.

WITNESS the signature and seals of the above parties.

IN THE PRESENCE OF .....[L. S.]

....[L. S.]

.....[L. S.]

.....[L. S.]

An examination of the form indicates its close similarity in principle to the contract of sale. There are, however, several points which should be noted. The parties may state any **value** upon their respective properties which they wish, provided the **cash difference** is not altered. Usually the values are inflated. This gives rise to the necessity of fixing definitely the **amount of brokerage.** The contract for exchange, therefore, usually contains a clause stating the names of the brokers for each party and the specific commission which shall be paid to each of them. If there is **one broker** working for both parties, it is customary to have the contract specify just what commission he shall be paid by each. Great care should be exercised in preparing a contract of exchange in order to avoid the confusion growing out of the fact that each party is agreeing to convey real estate and each piece is subject to mortgages, tenancies and other liens.

ILLUSTRATIVE CONTRACT OF SALE—The following is a typical form of contract. James Brown is selling to Martin Smith premises No. 12 Walnut Street, in the Borough of Manhattan, City of New York, and which are shown upon the diagram in Fig. 1.

The premises are improved with a six-family apartment building, rents $3,000 per year, the tenants having yearly leases. The price is $18,000, to be paid as follows: $2,000 on the contract, $4,000 on closing of title, $3,000 by delivery of the purchaser's bond and purchase money mortgage to secure that amount with interest at 6% per annum and payable in semi-annual installments

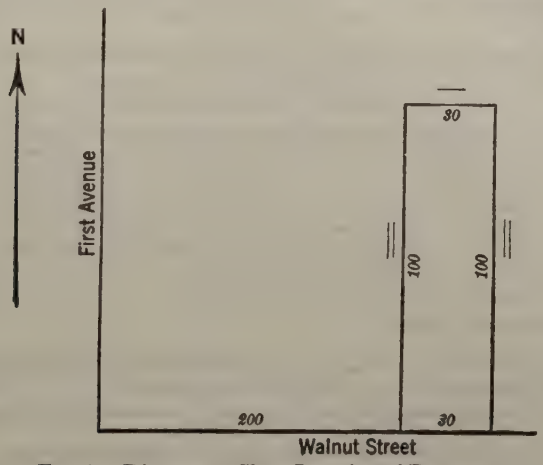

FIG. 1. Diagram to Show Location of Property

of $500 and interest, until paid; the balance, $9,000 by the purchaser taking title subject to a mortgage to secure that amount. It is agreed that title shall be closed in 30 days from date of contract and that John Jones is the broker in the transaction.

Typical Contract of Sale of Real Estate

AGREEMENT made and dated *June 15th, 1925* between *JAMES BROWN,*

hereinafter described as the seller, and *MARTIN SMITH,*

hereinafter described as the purchaser,

WITNESSETH, that the seller agrees to sell and convey, and the purchaser agrees to purchase all that lot or parcel of land, with the buildings and improvements thereon, in *the Borough of Manhattan, City, County and State of New York, bounded and described as follows, to wit:*

BEGINNING at a point on the northerly side of Walnut Street, two hundred (200) feet easterly from the corner formed by the intersection of the northerly side of Walnut Street and

the easterly side of First Avenue; running thence northerly parallel to First Avenue one hundred (100) feet; thence easterly parallel to Walnut Street thirty (30) feet; thence southerly again parallel to First Avenue one hundred (100) feet to the northerly side of Walnut Street, and thence westerly along the northerly side of Walnut Street thirty (30) feet to the point or place of beginning.

The premises are sold subject to an existing mortgage of $9,000.00 hereinafter mentioned. Also subject to the rights of the present tenants each of whom has a lease for one year expiring September 30, 1925, and the gross rentals being $3,000.00.

The price is

$18,000.00

Dollars, payable as follows:

$2,000.00

Dollars on the signing of this contract, the receipt of which is hereby acknowledged.

$4,000.00

Dollars in cash on the delivery of the deed as hereinafter provided.

$9,000.00 by the purchaser taking title subject to a mortgage to secure that amount which mortgage becomes payable January 1, 1928, and runs with interest at 6% per annum.

$3,000.00 by the purchaser executing and delivering on the closing of title his bond and purchase money mortgage to secure that amount covering the above described premises and to be paid as follows: $500.00, six months after the date of closing title and a like amount semi-annually thereafter until the full amount of said mortgage is paid, with interest at 6% per annum payable with each installment. Said bond and mortgage shall be drawn by the attorney for the seller at the expense of the purchaser who shall pay the mortgage tax, recording fees, and revenue stamps on the bond. Said mortgage shall contain the usual junior mortgage clauses including the subordination and lifting clauses and defaul. in prior mortgage clause.

Said premises are sold subject to:

1. Building restrictions and regulations in resolution or ordinance adopted by the Board of Estimate and Apportionment of the City of New York, July 25th, 1916. and amendments and additions thereto now in force.

All personal property appurtenant to or used in the operation of said premises is represented to be owned by the seller and is included in this sale.

This sale covers all right, title and interest of the seller of, in and to any land lying in the bed of any street, road or avenue opened or proposed, in front of or adjoining said premises, to the centre line thereof, and all right, title, and interest of seller in and to any award made or to be made in lieu thereof, and in any award for damage to said premises by reason of change of grade of any street; and the seller will execute and deliver to the purchaser, on closing of title, or thereafter, on demand, all proper instruments for the conveyance of such title and the assignment and collection of any such award.

If at the time of the delivery of the deed the premises or any part thereof shall be or shall have been affected by an assessment or assessments which are or may become payable in annual installments, of which the first installment is then a charge or lien or has been paid, then for the purposes of this contract all the unpaid installments of any such assessment including those which are to become due and payable after the delivery of the deed, shall be deemed to be due and payable and to be liens upon the premises affected thereby and shall be paid and discharged by the seller upon the delivery of the deed.

The following are to be apportioned:

1. Rents and interest on mortgages.
2. Rents of gas ranges.
3. Insurance premiums on existing policies.
4. Taxes and water rates for the calendar year.

If there be a water meter on the premises, the seller shall furnish a reading to a date not more than thirty days prior to the time herein set for closing title and the unfixed meter charge for the intervening time shall be apportioned on the basis of such last reading.

All notes or notices of violation of law or municipal ordinances, orders or requirements noted in or issued by the Tenement House Department, Fire Department, Building Depart-

ment, Labor Department, Health Department, or other State or Municipal Department having jurisdiction, against or affecting the premises at the date hereof, shall be complied with by the seller and the premises shall be conveyed free of the same, and this provision of this contract shall survive delivery of the deed hereunder. The seller shall furnish the purchaser with an authorization to make the necessary searches therefor.

The deed shall be in proper statutory short form for record, shall contain the usual full covenants and warranty, and shall be duly executed and acknowledged by the seller, at the seller's expense, so as to convey to the purchaser, the fee simple of the said premises, free of all encumbrances except as herein stated.

All sums paid on account of this contract, and the reasonable expense of the examination of the title to said premises are hereby made liens thereon, but such liens shall not continue after default by the purchaser under this contract.

The risk of loss or damage to said premises by fire until the delivery of the deed is assumed by the seller.

The deed shall be delivered upon the receipt of said payments at the office of

John Jones, 18 East 14th Street, Manhattan, N. Y.

at *2 P. M.* o'clock on *July 15th* *1925.*

The stipulations aforesaid are to apply to and bind the heirs, executors, administrators, successors and assigns of the respective parties.

The seller agrees that

John Jones

brought about this sale and agrees to pay the broker's commission therefor.

WITNESS the signatures and seals of the above parties.

IN PRESENCE OF
(*Witnesses*) (*Signature*) [L. S.]

(*Signature*) [L. S.]

DESCRIPTION BY MONUMENTS.—The following in connection with the diagram in Fig. 2, on the next page, describes a property by monuments.

ALL that certain farm known as HILL TOP FARM at Scodack Landing, Ulster County, New York, which is more particularly bounded and described as follows:

COMMENCING at the southwesterly corner of said farm at the intersection of Little Brook with Sunset Turnpike; running thence northerly and northeasterly along said Little Brook to the point where said Little Brook is intersected by the stone fence forming the northeasterly boundary of the farm herein described; running thence southeasterly along said stone fence to an oak tree where the Sheep Lane crosses said stone fence; running thence along said Sheep Lane to its intersection with Sunset Turnpike, and thence along Sunset Turnpike to the point or place of beginning.

Title Examination and Insurance

NECESSITY FOR TITLE EXAMINATION.—Ownership of real property is evidenced by possession and title. In early days possession alone existed; there were no instruments in use. As long as the owner stayed in possession he was safe. Once let him leave the property and upon his return, he might find another in possession. The real owner was in a predicament because it was his word against the trespasser, and the trespasser usually succeeded in his claim because he had possession. This resulted in great fraud and a remedy was sought. There consequently arose the custom of evidencing the transfer of ownership by means of a deed signed by the seller and delivered to the purchaser. The custom later was made law under the Statute of Frauds. Thus a trespasser was unable to secure any advantage by stealthy seizure of possession since he was unable to show a deed to him.

FIG. 2. Diagram of Property Described by Monuments

DOCTRINE OF NOTICE.—Later the "doctrine of notice" was evolved. It was recognised that a person in possession might have a right to the property and the mere fact that he was in possession was actual notice to the world of his possible claim. That was quite fair as the person in possession was usually the owner. However, with the development of renting, mortgaging, etc., it became necessary to formulate some plan to protect those persons who owned and had let the property and those who had an interest, by lien or encumbrance, upon the property.

This situation was solved by **the recording acts** under which, in brief, a **public office** is designated, county clerk or register, in each county, and all instruments affecting real estate in that county are there recorded. All instruments properly recorded are presumed to give **"constructive notice"** to all persons. Everyone is presumed to know their contents and effect and is bound by them.

It is, therefore, necessary that a purchaser, prospective lender on mortgage or tenant, not only inspect the premises, but also **search the title** by having an examination made of the public records. This examination may be made by a skilled attorney or **title examiner.** He, however, does not guarantee his work except against carelessness, and even then he may be financially incapable of reimbursing his client for loss.

TITLE INSURANCE.—It is, therefore, far better to have the **title examined and insured by a title insurance company.** The theory of title insurance is that the applicant pays a charge which covers not only the cost of the examination but also contributes to a fund from which losses are paid. This charge is paid only once. Upon receiving an application for title examination, the company first makes a thorough examination of the title, this before it is insured. Whatever liens or encumbrances are revealed by the search are reported. The seller or mortgage borrower then clears up such of them as he has not excepted in his contract of sale, or if borrowing, such of them as would jeopardize the lien of the mortgage. The title is then closed and the deed and other instruments delivered. The **policy of title insurance** by which the purchaser or mortgage lender is insured is then delivered. In some states the policy insures only against defects of title which the records might reveal. In New York and most other states the insurance is absolute, covering forged records, misstatements and unrecorded instruments. The policy usually is in four subdivisions:

1. General agreement
2. Schedule A
3. Schedule B
4. General conditions

The **general agreement** is the first page and names the insured, the **amount of insurance** (being the price, if a sale, or amount of mortgage if a loan), is dated and signed by the title insurance company. **Schedule A designates** the estate of the insured—fee, life-estate, mortgagee, etc.—states how the estate was acquired by the insured, and gives a description of the property. This description should always tally with the deed or mortgage. **Schedule B** names those defects of title, liens and encumbrances against which the company does not insure. It will be noted that the company does not insure against any liens or encumbrances which its search revealed unless they have been cleared up. The last part of the policy is a statement of the **general conditions of the company's obligation.** First, the company guarantees that the title is marketable and in the condition stated in the policy. The company agrees to reimburse any loss to which the insured may be put in defending litigation and enforcing the title insured. Second, where the title is not in the condition insured, the company agrees to make good any loss the insured may sustain. The company reserves the right to defend any litigation through its own counsel.

When the insured later sells the property, he should use care to describe the property exactly as in his policy and to except those matters stated in Schedule B. He is thus undertaking to sell only what has been insured to him.

Title Closing

PREPARATION FOR CLOSING.—The closing of title is the point to which the contract leads. In fact, closing is merely the **performance of the contract** and everything is done exactly in accordance with its provisions. Each party should be prepared with all necessary information and instruments which will be desired at the closing. These matters should be prepared in advance in order that there may not be undue delay. Since the closing follows the terms of the contract, each party should come to the closing with it in hand. There are, however, various matters concerning each which require attention.

The Seller.—The seller should prepare, and either have executed or be ready to execute **his deed.** Usually it is better for the seller to be present at the closing, as there are often matters arising which may require his signature. He will do well to have ready **the bond and purchase money mortgage** (if the contract calls for such). He should have all his **insurance policies** and papers to prove

present status of existing mortgage (if it has been reduced or extended), also **latest receipts** for interest, taxes, water-rates. If the property is in possession of a tenant or tenants under written lease, the seller should be ready to produce the **lease or leases.**

It will be borne in mind that the purchaser has been having the title examined. In many cases the examiner calls for proof by affidavit of various matters or shows encumbrances upon the title which the seller must remove in order to carry out his contract. The seller will do well to arrange to have the purchaser, as soon as he receives his report of title, advise the seller of any such matters. This enables the seller to dispose of them before or at the closing instead of not becoming aware of them until the closing and being compelled to ask an adjournment in order to dispose of them.

The Purchaser.—In addition to his contract the purchaser should have his report of title and a survey. The **report of title** shows the condition of the seller's title. There may or may not be liens and encumbrances shown on the report. If there are none, all is well. If there are any liens and encumbrances, they will fall into either of two classes, i.e., those subject to which the property is being sold or those not excepted in the contract. Those not excepted must be removed by the seller. As to those which are to remain, it may be that proof will be required of their present status; thus, with a mortgage, proof may be necessary to show reduction or extension. All liens and encumbrances should be reported, to the seller as soon as known, so that he may have opportunity to remove them or get needed proof.

The report of title shows only the condition of the title. It does not indicate the physical situation, i.e., position of structures on the premises. A **survey** is necessary for this purpose. By it may be determined encroachments and other physical facts which may very seriously affect the title. In addition to the report of title and survey, an **inspection of the premises** should be made. This is important not only to make sure that there has been no change in the physical condition of the property, but also that every person in the premises may be questioned as to what interest he claims in the property, and if a tenant, the terms of his letting.

The purchaser should be financially prepared to conveniently close the title. Under the terms of the contract, he is to pay a certain sum. Adjustments of various items will, however, be made at the closing which will somewhat vary the amount. A satisfactory arrangement is for the purchaser to have a **certified check** for something less than the amount named in the contract, and cash or blank checks to cover the balance.

THE CLOSING.—The parties and their representatives will gather at the time and place of closing stated in the contract. Should it be necessary to take an **adjournment,** such adjournment should be agreed upon, reduced to writing and signed by the parties or their representatives. When the title is finally ready to be closed, and all parties are gathered, the purchaser should first examine his report of title to ascertain exactly the final condition of the title and what instruments and proofs he desires. He should also make certain that the survey and inspection are satisfactory, and most important, that there is no doubt of the identity of the seller. The deed, bond and mortgage (if there is one) and other instruments should then be examined for form and substance, and if proper, should be executed by the respective parties. Among other things the purchaser should always take from the seller a **letter of notification** to the tenants advising them of the sale.

ADJUSTMENTS.—Nothing now remains but the adjustment of items which the contract provides shall be apportioned, and the computation of the amount which the purchaser shall pay. This may be more easily explained by an **example.**

Assume the following facts: The price is $20,000; $1,000 was paid on signing contract; $4,000 is to be paid on the closing. The purchaser takes title subject to an existing mortgage of $10,000 and gives back his bond and purchase money mortgage for $5,000. It is agreed in the contract that interest on mortgage, taxes, water-rates, insurance premiums and rents shall be apportioned. The data with reference to the **items to be apportioned** is revealed by the title search or inquiry on the closing. Assume that the following facts have been ascertained: Interest on the existing mortgage runs at rate of 6% per annum and is payable January 1 and July 1. Taxes (since the premises are in New York City) are payable May and November 1 and amount to $288 for each half year. There is a water meter in the premises and the last receipted bill shows a charge of $13.65 for the period from January 1 to March 31. The building is insured for $15,000 for three years, dated March 1 immediately preceding the closing; premium $36. Three families are in possession as tenants, paying respectively $125, $100 and $75 per month, the rent of all tenants being due on the first of each month in advance and having been paid for the month in which title is closed. Title is closed on June 15.

Statement of Adjustments.—The statement of adjustments is prepared in **credit and debit form;** the credits in favor of the purchaser and debits in favor of the seller. Using the example, the **credits** would be as follows: Amount paid on contract $1,000; existing mortgage $10,000; interest on that mortgage at 6% from January 1 to June 15, $275, this for the reason that the interest is not paid in advance, and the purchaser on July 1 will pay the mortgage lender a full six months' interest; next, the purchase money mortgage $5,000; rents $150, since the seller has collected for the full month of June, and title is passing in the middle of the month. The **debits** allowed to the seller: Price $20,000. The tax adjustment is apparently complicated for the reason (often not understood) that taxes in New York City are levied for the calendar year; the payment on May 1, therefore, covering the period expiring June 30. Consequently, in the instant case, the purchaser must allow the seller the tax for one-half a month which based on the amount of $288, paid May 1, for the half year, would be $24. The fire insurance premium was paid in advance by the seller for 3 years on March 1. Only 3½ months' premium has been used, so that the seller receives an allowance for the unexpired term $32.50.

The adjustments when figured are usually set up as indicated on the following form, by which is ascertained the balance due, and which amount when paid by the purchaser to the seller completes the transaction. The instruments are delivered and recorded usually by the title company's representative and the bill of the title company paid. In due course the title insurance policy is delivered to the purchaser.

Credit		Debit	
Paid on contract	$ 1,000.00	Price	$20,000.00
Existing mortgage	10,000.00	Taxes, ½ month	24.00
Interest, 5½ months	275.00	Insurance	32.50
Purchase money mortgage	5,000.00		
Rents, ½ month	150.00		
Total credits	$16,425.00	Total debits	$20,056.50
		Total credits	16,425.00
		Balance	$ 3,631.50

Adjustments on Mortgage Loan.—The computation upon a mortgage loan is much simpler. All liens must be disposed of by the borrower, who also pays all expenses in connection with the loan. Such items as unpaid taxes, assessments and water rates are computed with interest to date. To the sum of these is added the expenses for the title examination, drawing papers, survey, mortgage tax (if any), recording, and revenue stamps. The total of all the above is deducted by the lender, who will pay them from the amount of the loan and pay the balance to the borrower.

Deeds, Bonds and Mortgages

PURPOSE OF THE DEED.—The deed is the instrument by which title to real property is transferred. It is the means by which the seller divests himself of title and which, when delivered to the purchaser, vests legal title in him and evidences his ownership of the property.

FORMS OF DEED.—There are **two principal types** of deed—the bargain and sale deed and the quit-claim deed. An understanding of the two is desirable. The **bargain and sale deed,** regardless of what covenants it may contain, always uses the word "grant" while the **quit-claim deed** omits "grant" but uses the words "remise, release and quit-claim." The use of the word "grant" implies in law a warranty on the part of the grantor that the grantor has possession of the property either personally or by his tenants or agents. Consequently, if one desires to convey an interest which is vague, conjectural or only a possible cloud on the title, he should never use other than a quit-claim deed. In that way he does not warrant anything but simply transfers whatever interest (if any) he may have in the property.

The bargain and sale deed has several variations: the full covenant and warranty deed, the executor's deed, the deed with covenant against grantor's acts, and the simple bargain and sale form without any covenants. Each is used to accomplish a definite purpose. It must be borne in mind always that the title search reveals only what the records show; there may be outstanding unrecorded instruments, misstatements on the record or forgeries. These are not apparent at the time of transfer, but may later arise to cause trouble. The purpose, therefore, of all the covenants is, to the extent of each, to bind the seller to protect the purchaser against, not only present existing undiscovered defects of title, but also those which may develop in the future. The full covenant and warranty deed contains usually five covenants and warranties. The wording varies somewhat in the different states but the substance is practically the same. These covenants are as follows:

Seizin.—"That the said ..... seized of the said premises in fee simple and has good right to convey the same." The grantor warrants that he has possession, title and the right to sell. For a breach of this covenant the seller may recover his damage up to the price he paid with interest.

Quiet Enjoyment.—"That the party of the second part shall quietly enjoy the said premises" is a guarantee that the purchaser shall not be disturbed in his possession of the property. Mere threats or claims are not a breach of this covenant. Any expenses to which the purchaser may be put in making good his right of possession are recoverable.

Encumbrances.—"That the said premises are free from encumbrances." Under this covenant the purchaser may recover from the seller any amount

which he may necessarily expend in paying off any encumbrances which are not excepted in the deed.

Further Assurance.—"That the party of the first part will execute or procure any further necessary assurance of title to said premises." The grantor agrees to procure and deliver any other instrument which may later appear to be requisite to give full title to the purchaser.

Warranty.—"That said.....will forever warrant the title to the said premises." This is the most important covenant. It is an absolute guarantee of full title. Should later developments show the title bad, the purchaser may recover the price and interest.

Following is a form of warranty deed with full covenants:

Warranty Deed with Full Convenants

THIS INDENTURE, made the day of

, nineteen hundred and twenty

Between

, part of the first part,

and

, part of the second part,

WITNESSETH, that the part of the first part, in consideration of

Dollars,

lawful money of the United States,

paid by the part of the second part, do hereby grant

and release unto the part of the second part,

and assigns forever,

ALL

Together with the appurtenances and all the estate and rights of the part of the first part in and to said premises.

To Have and to Hold the premises herein granted unto the part of the second part,

and assigns forever

And said

covenant as follows:

First.—That said

seized of the said premises in fee simple, and ha good right to convey the same;

Second.—That the part of the second part shall quietly enjoy the said premises;

Third.—That the said premises are free from incumbrances;

Fourth.—That the part of the first part will execute or procure any further necessary assurance of the title to said premises;

FIFTH.—That said
will forever warrant the title to said premises.

IN WITNESS WHEREOF, the part of the first part ha hereunto set

hand and seal the day and year first above written.

IN PRESENCE OF:

State of
County of } ss.:

On the day of , nineteen hundred and twenty ,

before me came
to me known to be the individual described in, and who executed, the foregoing instrument, and acknowledged to me that he executed the same.

State of
County of } ss.:

On the day of , nineteen hundred and twenty ,

before me came , the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides in

that he knows

to be the individual described in, and who executed the foregoing instrument; that he, said subscribing witness, was present, and saw execute the same; and that he, said witness, at the same time subscribed h name as witness thereto.

Executor's Deed.—It will be noted that the full covenant and warranty deed places a heavy burden on the seller. He should certainly know all about his title before he signs such a deed. An executor, acting under power of sale in a will, or other fiduciary, knows little of the title and is unwilling to make such rigorous guarantees. He is, however, ready to covenant that he, himself, has done nothing harmful. He will therefore use the bargain and sale deed with but one covenant: that against grantor's acts "the said..... covenants that he has not done or suffered anything whereby the said premises have been encumbered in any way whatever."

PREPARATION OF DEED.—It is desirable that legal instruments be prepared by counsel. Yet an understanding of certain points will be found helpful. The deed is **a single paper;** it is not prepared in duplicate as are contracts. It must be signed by the seller (sometimes designated grantor or party of the first part). It may be sealed, though that is not necessary in most states. The deed is **to be recorded** and, therefore, the signature of the seller must be proven by either the acknowledgment of the signer or the deposition of a subscribing witness. A **corporation** executes an instrument by affixing its seal. That is the important act. The seal is affixed by one of its officers so authorized by its directors or governing board. Such officer must be sworn and acknowledge the seal affixed to be the corporate seal, to have been by him affixed, and that he was properly authorized to do so.

Most states recognize the **dower right of a wife.** She must, therefore, release her dower in some way, in order for the purchaser to receive full title. This is customarily accomplished by having her join in the deed with her husband. The deed is not void if undated; the date is merely a memorandum.

The **description of the property** conveyed should be full and complete. It ould be sufficient to identify the property exactly at the present time and in e future. If monuments are designated, they should, if possible, be such as ill remain indefinitely.

Bearing in mind the effect of the covenant against encumbrances, it is neces- ary to enumerate in the deed all **liens and encumbrances** subject to which the roperty is being conveyed. These are usually set forth following the habendum; e., the clause reading "to have and to hold the premises herein granted unto he party of the second part, his heirs and assigns, forever."

PURPOSE OF BOND AND MORTGAGE.—The deed is the instrument sed to convey title unconditionally. The mortgage is merely a pledge and, herefore, conditional. When a loan is secured and land given as security, two nstruments, the bond and mortgage, are usually used. In some states a note s given instead of the bond. In some states, too, by reason of inconvenience nd delay in foreclosing, a deed of trust is used in place of the mortgage.

THE BOND.—The forms of the bond and mortgage are all very similar; hose given below being the New York forms. Each of the instruments as a definite purpose. **The bond** is in **three main divisions:** (1) the **acknowl- dgment of indebtedness;** (2) the **promise to pay;** and (3) **default provisions.** The borrower (designated as obligor or party of first part) admits his indebted- ess to the lender (obligee or party of second part) in a certain sum. He then roceeds to promise to repay this loan at a certain time or times with interest t a certain rate. If there are two or more borrowers, the lender usually insists hat their obligation be joint and several so that he may collect from all or one r any combination which is most convenient to him.

If the loan is payable at one time, the wording printed in the specimen bond nay be used. If, however, the principal is to be **paid in instalments,** changes o fit the case must be made as for example,

..... which sum said obligor does hereby covenant to pay o said obligee, his legal representatives or assigns, in instalments as follows: $1,000.00 r more thereof on the ..... day of ..... next ensuing, and a like um or more quarterly thereafter, until the full amount of principal is paid; together with he interest thereon from the date hereof and on the unpaid balance from time to time t the rate of 6% per annum and payable quarterly with each instalment of principal.

The **default provisions** have for their purpose the preservation of the pledge nd of the lender's equity. They consist usually of the interest clause, tax lause, fire insurance clause, and a blanket clause. The **interest and tax lauses** give the borrower a certain period of grace, and if he defaults, ermits the lender to recover his loan before a large amount of interest has ccumulated, or large amounts of taxes have been levied which become liens uperior to his mortgage. The lender wishes to be protected against impairment f the security by fire, and this clause compels the borrower to secure such **nsurance** for the benefit of the lender. Should the borrower fail to do so, the ender, himself, may procure it and demand payment of the principal sum. The **blanket clause** is added to bring into the bond, by reference, all the terms nd conditions of the mortgage.

The bond must be signed. It need not be sealed in most states. It is not ecorded; consequently in many states it is neither witnessed nor acknowl- dged. Dower has no bearing on the bond, and consequently the wife of the orrower need not sign unless she is a co-owner of the property, in which event is usual to have her join in the bond.

THE MORTGAGE.—The mortgage is the means by which real property is pledged as security for the bond. The borrower is the **mortgagor** or party of the first part; the lender is the **mortgagee** or party of the second part. The wife of the mortgagor must join in the instrument to release her dower, or else execute a separate paper. The amount of the loan and the time and manner of payment should coincide exactly with the bond. The same rules with reference to the description of the property in a deed govern a mortgage.

Following the description are certain covenants of the mortgagor. They are all for the benefit of the mortgagee. The nine covenants given in the form below are known as the **standard clauses.** The first clause is a promise to repay the loan. Therefore, even if the bond should be lost or destroyed, the terms of the bond, as stated in the mortgage, may be enforced. The second and fourth clauses are similar to the bond. The third clause prohibits impairment of the security by removal or demolition of structures on the property. Any such act may be enjoined. By the fifth clause the mortgagee, if he forecloses his mortgage, may apply to the court for a receiver to collect rents and manage the property for his benefit pending the foreclosure action. The sixth clause goes beyond the fourth clause in that the mortgagee may prevent sale of the property, or an interest in it, for defaulted taxes by paying them himself, adding the amount to the principal of the loan and collecting it from the proceeds of foreclosure sale. The seventh clause enables the mortgagee to compel the borrower to sign and deliver a statement of the amount due. This is important if the mortgagee wants to sell his mortgage, as the purchaser usually demands such a statement. The eighth clause clarifies the method of giving notice to the borrower. The warranty in the ninth clause has the same meaning as the similar clause in the full covenant and warranty deed.

In addition to the foregoing standard clauses, there are others often used. **The Brundage clause** permits the mortgagee to declare the mortgage immediately due in the event of new laws adding to taxation of the mortgagee's rights under either bond or mortgage. **The sale-in-one-parcel clause** avoids the necessity, where the mortgage covers several parcels some of which have been sold since the loan, of the mortgagee's selling the parcels separately, but lets him sell all the parcels in one large parcel.

Junior mortgages contain usually the following **clauses:**

This mortgage is subject and subordinate to ..... mortgage ..... given to secure the payment of ..... Dollars and interest, recorded in the office of the ..... of the County of ..... in Liber ..... of mortgages, page ....., now a prior lien on said premises and shall remain subordinate to any renewal or extension thereof or any new mortgage given to replace the same not in excess of $.....

And It Is Hereby Expressly Agreed, that should any default be made in the payment of the interest on ..... said prior mortgage.., and such interest remain unpaid and in arrears for the space of ten days, or should any suit be commenced to foreclose ..... said prior mortgage.., then the amount secured by this mortgage and the accompanying bond shall become and be due and payable at any time thereafter at the option of the owner or holder of this mortgage.

And It Is Hereby Further Expressly Agreed, that should any default be made in the payment of the interest on ..... said prior mortgage.., the holder of this mortgage may pay such interest, and the amount so paid, with legal interest thereon from the time of such payment, may be added to the indebtedness secured by this mortgage and the accompanying bond, and shall be deemed to be secured by this mortgage and said bond, and may be collected thereunder.

Of these the first is known as the **lifting clause.** By it the junior mortgage, in the event of payment of the prior mortgage, is held up (lifted) and prevented from taking the place of the prior mortgage, while a new prior mortgage is being negotiated. This clause is most important to the borrower. The second clause is known as **default-in-prior-mortgage-clause.** Its terms are self-evident. It makes it possible for the junior mortgagee to prevent default and foreclosure of the prior mortgage while he is foreclosing his own mortgage.

The mortgage is executed by signing it. It may, though in most states it need not, be sealed. Since it is to be recorded, it should be either acknowledged or attested by a subscribing witness. In many states there is a **mortgage tax.** In New York this tax is ½ of 1% of the principal, which is collected by the recording office.

ENFORCEMENT OF BOND AND MORTGAGE.—The lender is not compelled to resort to the mortgage. If there be a default, he may, if he wishes, sue on the bond, just as on any other promissory instrument. Ordinarily the loan is made in reliance upon the property, and recourse is had to it. Acting under the mortgage the lender may do one of three things: (1) become a mortgagee in possession; (2) foreclose by advertisement; or (3) foreclose by legal action.

A **mortgagee may take possession** only with the borrower's consent. This is seldom given. This relief is unsatisfactory for the further reason that the mortgagee in possession has no title to the property but is simply entitled and bound to manage the property, pay the carrying charges, apply the net profits to his loan, and ultimately, when he has recovered the amount of his loan and interest, turn back the property to the borrower.

Foreclosure by advertisement is quick and inexpensive. All that is required is advertisement and sale of the property in accordance with law and a deed to the purchaser at the sale. However, this remedy is seldom used for the reason that the purchaser has no adequate means of securing possession if the borrower refuses to surrender the property.

The **usual method** is to **foreclose by action.** This, as its name states, is a legal proceeding in a court having jurisdiction. Legal process is served upon the borrower, owner and all persons having liens subordinate to that of the lender. They all have opportunity to object to the claim of the lender. If an issue is raised, it is tried and decided. If decided in favor of the lender, or if there is a default, the court, either itself or by a referee, computes the amount due the lender. The property is then advertised for sale and sold under the direction of a referee or other officer designated for the purpose. The proceeds of the sale are applied to pay the expenses of the sale and the action. Taxes and other public liens are then paid. The balance is then applied to pay the lender's claim and interest. If there is more than sufficient, the surplus is deposited in the county treasurer's office (in New York City, the chamberlain) and is the property of the owner of the premises, subject to whatever other liens there may be. If there is not sufficient to satisfy the lender's claim, a judgment may be entered against the borrower for the amount of the deficiency, and enforced and collected from other property of the borrower.

Form of Bond

KNOW ALL MEN BY THESE PRESENTS,

THAT

hereinafter designated as the obligor , do hereby acknowledge to be indebted to

hereinafter designated as the obligee, in the sum of

dollars, lawful money of the United States, which sum said obligor do hereby covenant to pay to said obligee,

or assigns, on the day of nineteen hundred and , with interest thereon, to be computed from the day of , 19 , at the rate of per centum, per annum and to be paid on the day of next ensuing the date hereof, and thereafter.

And It Is Hereby Expressly Agreed That the whole of the said principal sum shall become due at the option of said obligee after default in the payment of interest for days, or after default in the payment of any instalment of principal for days, or after default in the payment of any tax, water rate or assessment for days after notice and demand. All of the covenants and agreements made by the said obligor in the mortgage covering premises therein described and collateral hereto, are hereby made part of this instrument.

Signed and sealed this day of , 192

In the presence of

State of
County of } ss.:

On the day of , nineteen hundred and twenty ,

before me came
to me known to be the individual described in, and who executed, the foregoing instrument, and acknowledged to me that he executed the same.

State of
County of } ss.:

On the day of , nineteen hundred and twenty

before me came
to me known to be the individual described in, and who executed, the foregoing instrument, and acknowledged to me that he executed the same.

State of
County of } ss.:

On the day of , nineteen hundred and twenty ,

before me personally came , the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides in

that he knows

to be the individual described in, and who executed the foregoing instrument; that he, said subscribing witness, was present, and saw execute the same; and that he, said witness, at the same time subscribed h name as witness thereto.

State of
County of } ss.:

On the day of , nineteen hundred and twenty ,

before me came , to me known, who, being by me duly sworn, did depose and say that he resides in

that he is the of

the corporation described in, and which executed, the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of of said corporation; and that he signed h name thereto by like order.

[*See following page*]

PAYMENTS OF PRINCIPAL

DATE	AMOUNT

PAYMENTS OF INTEREST

Date of Payment	Amount Paid	To what Date	By whom Received	Date of Payment	Amount Paid	To what Date	By whom Received

[Form appearing on reverse side of bond]

Form of Mortgage

THIS MORTGAGE, made the day of nineteen hundred and twenty , between

, the mortgagor,

and

, the mortgagee.

WITNESSETH, that to secure the payment of an indebtedness in the sum of

dollars,

lawful money of the United States. to be paid on the day of , nineteen hundred and , with interest thereon to be computed from , at the rate of per centum per annum, and to be paid

according to a certain bond or obligation bearing even date herewith, the mortgagor hereby mortgages to the mortgagee.

And the Mortgagor covenants with the Mortgagee as follows:

1. That the mortgagor will pay the indebtedness as hereinbefore provided.
2. That the mortgagor will keep the buildings on the premises insured against loss by fire for the benefit of the mortgagee.
3. That no building on the premises shall be removed or demolished without the consent of the mortgagee.
4. That the whole of said principal sum shall become due after default in the payment of any installment of principal or of interest for days, or after default in the payment of any tax, water rate or assessment for days after notice and demand.
5. That the holder of this mortgage, in any action to foreclose it, shall be entitled to the appointment of a receiver.
6. That the mortgagor will pay all taxes, assessments or water rates, and in default thereof, the mortgagee may pay the same.
7. That the mortgagor within days upon request in person or within days upon request by mail will furnish a statement of the amount due on this mortgage.
8. That notice and demand or request may be in writing and may be served in person or by mail.
9. That the mortgagor warrants the title to the premises.

IN WITNESS WHEREOF, this mortgage has been duly executed by the mortgagor.

IN PRESENCE OF:

State of
County of } ss.:

On the day of , nineteen hundred and twenty , before me came

to me known and known to me to be the individual described in, and who executed, the foregoing instrument, and acknowledged to me that he executed the same.

State of
County of } ss.:

On the day of , nineteen hundred and twenty , before me came , the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did

epose and say that he resides in , that he knows to be the individual described in, and who executed he foregoing instrument; that he, said subscribing witness, was present, and saw execute the same; and that he, said witness, at the same time, subscribed name as witness thereto.

State of
County of } ss.:

On the day of , nineteen hundred and twenty before me came , to me known, who, being by me duly sworn, did depose and say that he resides in , that he is the of , the corporation described in, and which executed, the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of of said corporation; and that he signed name thereto by like order.

Leases and Letting Agreements

DEFINITIONS.—The relation of landlord and tenant arises when one as owner or lessor grants to another, as tenant or lessee, the right to use real property in return for a definite periodical return in money, goods or services. That which is received by the landlord for the use of the land is called rent. The amount of the rent may not always be known definitely in advance, but if not known, the agreement will provide for a method of fixing the amount in the future. The **lease or letting agreement** is the agreement governing the tenancy. Its principal features are those stating the parties, premises, rent and term. The agreement need not be in writing unless the term is a period of more than one year. Under the Statute of Frauds a **lease for more than one year** must be in writing to be enforceable.

TENANCIES CONSIDERED AS TO TERM.—The term of a tenancy is important because of the fact that different legal classifications are based upon its term. Three classes are recognized: (1) month to month tenancies; (2) tenancies at will; and (3) tenancies for years.

Month to Month Tenancies.—A month to month tenancy is one in which the term is definitely fixed at one month for an agreed rental. It is the general understanding that the tenancy will continue for further successive monthly periods and the agreement is a **self-renewing one.** No action being taken by either party, it will be assumed the tenant may remain and that he will be liable for the rent from month to month. Tenancies of this kind have sometimes been called "monthly tenancies" but recent decisions indicate that "month to month" is a better name for them.

Under the New York law, a month to month tenant may remove at the end of any month without notice and without further liability for rent. The landlord, however, must give the tenant **30 days' notice** of his intention to terminate the tenancy. In making a rental of this kind, if it is to last for one month only, the landlord must as soon as making the agreement give the tenant notice to quit. If he fails to do so, the tenant may continue for the second month, or until the month ending at least thirty days after he receives the notice.

Verbal agreements for a month to month tenancy are legal and binding but it is advisable to have a written letting agreement if one can be obtained. The following may be suggested as a properly worded short form of agreement:

AGREEMENT dated ..... 192.., between .....
....., landlord, and ....., tenant.

The tenant hires from the landlord and the landlord lets to the tenant the following premises in the borough of ..... of the City of New York, to wit:

.....
.....
.....

The term begins ..... and ends .....

The rent is ..... Dollars, payable in advance. The tenant hereby agrees to permit applicants to inspect the interior of said premises between the hours of 10 A. M. and 5 P. M. daily and at or before the end of said term of this agreement to give up and surrender to the landlord full possession of said premises.

WITNESS the corporate seal of the landlord and the signature of one of its officers and the hand and seal of the tenant.

.....
.....

Tenancy at Will.—A tenancy at will is an **indefinite tenancy.** It is an agreement, written or oral, letting real property to a tenant upon a stipulated rental but without regard to the length of the term. It continues at the will of either party. It is, however, very similar to a month to month tenancy, especially if the rent is to be paid in monthly installments. Thirty days' notice of intention to terminate the letting is usually required on the part of both the tenant and the landlord.

Tenancy for a Year or Longer.—A lease for one year may be either oral or written. If the term is to be for more than one year, the lease must be in writing in order to be enforceable under the Statute of Frauds. The tenant is not entitled to receive notice of the landlord's intention to require him to remove at the end of the term. If he does not remove, he can be dispossessed. The landlord has the privilege, also, of considering him a holdover tenant for another term of one year at the same rent. A third option to the landlord is that he may notify the tenant that if he remains he does so as a month to month tenant. Unless a tenant is dispossessed, or notified that he is to be a month to month tenant, he has the right to hold possession for a further term of one year.

FORM OF LEASE.—There are a number of stationers' forms of leases, and many other special forms used by owners and agents. These various forms usually contain the clauses that are considered standard for all leases. The **"Gilsey" form** of lease may be mentioned as a well-known standard form in New York. The lease should be dated, give the names of landlord and tenant, describing them as such, a description of the premises, the length of the term (the date term shall commence and that on which it shall end), the amount of rent and how it is to be payable. A statement is sometimes made as to the use to which the tenant shall put the premises.

COVENANTS IN LEASE.—The agreement would be complete as a lease if it was signed at the end of the foregoing provisions. However, there are many contingencies that may arise and for which provision must be made by special clauses or covenants in the lease. Practically all of these covenants are inserted for the purpose of protecting the landlord. The only assurance the tenant gets is that he shall quietly and peaceably enjoy the use of the premises for the term of the lease, provided he pays the rent and performs all the covenants of the lease. Some of the **more important special clauses or covenants** usually included in a lease are those which provide as follows:

1. The tenant will take care of the premises, returning them to the landlord at the end of the term in good condition.
2. The tenant shall comply with orders issued by the various governmental departments having jurisdiction.
3. The tenant shall not assign the lease, sub-let the premises, or make any alteration without the landlord's consent in writing. The premises shall not be occupied for a purpose deemed disreputable or hazardous.
4. The tenant shall notify the landlord of any fire, and the landlord shall then repair the damage. If the damage is extensive the lease may terminate at the time of the fire.
5. The landlord and his agents may inspect the premises in reasonable hours, making necessary repairs and alterations. The landlord shall have the right to show premises, under certain restrictions, to prospective purchasers or tenants and may place "To Let" and "For Sale" signs on the building.
6. If the premises become vacant during the term, the landlord shall have the privilege of re-entry, and may also re-let the premises as the agent of the tenant. This clause should be so worded that a surrender and acceptance may not be implied, and that the liability of the tenant shall continue.
7. Many leases require the tenant to insure the plate glass for the benefit of the landlord, also to pay water charges, and sometimes taxes.
8. Tenant frequently holds landlord free from liability for damages to both persons and property.

SECURITY DEPOSITED UNDER LEASE AND GUARANTIES.—It is equently required that the faithful performance of the terms of a lease on the rt of the tenant be guaranteed by the deposit of a sum of money with the ndlord. Interest may be allowed on the deposit. A guaranty may also be in e form of a surety bond or agreement of guaranty made either by a surety mpany or one or more individuals. The lease will embody the clauses referring the deposit or guaranty.

TERMINATION OF LEASES.—All leases terminate on the last day of their rm without notice except, as has already been stated, certain notice must be ven under a month to month tenancy, and tenancies at will run indefinitely d require notice to terminate. Leases may be terminated before the end of e term by a **surrender of the premises by the tenant** and acceptance as such rrender by the landlord. A surrender may be definitely expressed as such, it may be an implied surrender and acceptance, as when the tenant abandons e premises and the landlord takes physical possession of them. If a lease is worded, a breach of the conditions may act as a limitation of the term, and e landlord may exercise his option and consider the lease terminated by the each. If a landlord causes or permits the premises to become uninhabitable ch condition might be construed to be a constructive eviction of the tenant, t this would not usually apply to lettings under which entire control of the emises passed to the tenant. The tenant could, if constructively evicted, nove and consider the lease terminated. A lease would usually be terminated the property were destroyed by fire or otherwise. The taking of property for blic purposes under the exercise of the right of eminent domain also acts a termination of a lease.

DISPOSSESS PROCEEDINGS.—A dispossess proceeding, sometimes called a nmary proceeding, is one brought by the landlord in a court of minor jurisdiction for the purpose of evicting a tenant from the premises. The right of dis-

possess is governed strictly by statute. It can be exercised only for (1) failure of the tenant to pay the rent as it becomes due; (2) failure of the tenant to remove at the end of the term—this is the dispossess of a holdover tenant; (3) use of the premises for unlawful purposes; (4) failure to pay taxes and assessments on the premises when the lease requires the tenant to pay them; (5) in the event of the tenant taking the benefit of an insolvent act, or if he is adjudged a bankrupt, provided, however, the lease is only for a term of 3 years or less. The dispossess proceeding consists of the filing of a petition setting forth the facts and the grounds for asking for a **warrant of dispossess.** The tenant is served with notice and has an opportunity to answer in court on the return day. If judgment is rendered for the landlord, a warrant of dispossess is issued. A **city marshal,** or other officer, is empowered to actually evict the tenant from the premises. A certain amount of discretion is allowed the court in dispossess proceedings, and leniency is often exercised in the case of illness or other matters that may appeal to the compassion of the judge.

EMERGENCY RENT LAWS.—Emergency rent laws were enacted in New York and some other states during and following the World War for the purpose of relieving the distress of tenants due to insufficient housing facilities and in order to restrain landlords from exacting unreasonable rents. They act as a **suspension of the right of dispossess** in many cases. Holdover tenants cannot be dispossessed at the end of the term of the lease unless it can be shown that they were objectionable tenants, or that the premises are required for the immediate use of the owner, or that the building is about to be demolished for the erection of a new building for which plans have been filed, or that stockholders in a building to be occupied co-operatively require possession for their own use. The rent laws have also had the effect of preventing landlords from dispossessing tenants for non-payment of rent where the rent can be shown to be unjust or unreasonable, and the terms of the lease oppressive. These laws are more or less temporary in character and were enacted because of the existing emergency.

GROUND LEASES.—Many large buildings are erected on leased land. Under leases of this kind, called "ground leases," the land is leased for a net rental for a long term of years. The tenant pays all charges and agrees to erect on the premises a building according to specified plans. The building becomes part of the land as soon as erected, but it is equitably the property of the tenant who has the right of possession during the term of his lease. The lease may provide for one or more renewal terms, also for a method of arbitration or otherwise for fixing the rent of the land for each successive term of the lease. The lessee of a plot upon which a building is to be erected has the problem of figuring the gross return from the proposed building. From this he will deduct the ground rent, all the expenses of maintenance, operation and repair of the building, interest on his investment, and amortization of the cost of the building. Anything left over after paying all of these charges would be a net return or profit on his operation.

The problem of the owner of the land in making a ground lease consists of a consideration of the following factors:

1. **Rent to be paid.** This should be sufficient to yield the owner a fair return on the value of his property. It is usually a net rental.

2. **Length of the term.** This should be sufficient to induce the lessee to erect the proposed building at his own expense. As the value of the land is likely to increase, provision is often made for a readjustment of the ground rent at the end of certain periods. For instance, if the lease is made for 21

years with the privilege of further renewals for terms of 21 years each, the rental of the land may be fixed by arbitration or otherwise, at the end of each of the terms.

3. **Building to be erected.** The owner of the land should know that the proposed building is an adequate improvement; that it will be carried through to completion; that if there are old buildings to be demolished, he will be secured against loss pending the erection of the new building. The new building becomes part of the land and is, therefore, the property of the owner, subject, however, to the terms of the lease.

Agency and Brokerage

DEFINITIONS.—A person who brings about real estate transactions between principals is called a broker, and his compensation is called **commission.** Commissions are paid him for each transaction and are in proportion to the amount involved in the transaction. If his compensation is a salary instead of a commission, he is a salesman and not a broker. A broker is usually the **agent** of one of the parties to the transaction. He may act as the agent of the owner in procuring a purchaser for property, or he may act as agent for the purchaser in securing a piece of property. He may also act as agent for a borrower in procuring a loan. Other transactions brought about by brokers are exchanges of real property and placing mortgage loans.

EMPLOYMENT OF BROKER.—For a broker to have a **legal claim for commission** on a transaction, it is necessary that he be able to show that he was employed by the one from whom he claims a commission. Simply bringing a purchaser to the owner of a piece of property does not give a broker legal claim for commission. A transaction resulting from such act would not make the principal liable for payment of a commission to the broker unless employment can be shown. The courts have held that owners cannot be enticed into the payment of a commission; it must have been their intention to employ the broker. Expressing it in another way, it has been said that volunteers are not paid for their services.

The best **contract of employment** for a broker is a written one. New York and some other states do not require that an authorization to sell property be in writing, but some states do require written authority. In New York, an oral agreement is as good as a written one, and the request of an owner of one whom he knows to be a broker, or who is apparently acting as a broker, to sell property would be construed as a contract of employment and therefore an agreement to pay a commission if a transaction be brought about. While a contract with the principal, either written or oral, expressed in words giving authority to sell and agreeing to pay a commission creates an express contract, the contract of employment may also be implied by the past acts of the parties. One who has been in the habit of dealing with the broker and paying commissions to him would be estopped from denying that he knew the broker was acting as such expecting to receive a commission on a new transaction. Employment may also be construed from other acts or past relations of the parties.

BROKER'S LICENSE.—In many states a license is required before a person or corporation may act as broker. Under the law in New York, it is unlawful to pay or accept compensation for bringing about real estate transactions unless the one receiving the compensation is a duly licensed broker. Application for a license is made to the Bureau of Licenses at Albany, N. Y., and a fee of $25 paid. While the applicant is supposed to be qualified to act as a broker,

apparently no attempt at an examination is made at the present time. Salesmen employed by brokers must have a salesman's license, the charge for which is $5. Some other states besides New York require real estate brokers to be licensed.

DUTIES OF BROKER.—A broker must be loyal to his employer. He must render him faithful service. If material facts come to his notice affecting the principal's interests, he should communicate them to the principal unless they had been told to him in confidence. If the broker is vested with the slightest discretion, his work is that of an agent and the moral principle, "No man can serve two masters," is applied to agencies. This principle precludes the broker from acting as the agent of both parties to a transaction unless both parties understand it and agree upon it. Unauthorized acceptance of a commission from the opposite side is not consistent with faithfulness, and forfeits the broker's right to collect a commission from his employer. Furthermore, a broker cannot pose as a broker and at the same time be the purchaser. He should not, therefore, sell property to himself and claim a commission for doing so unless such act is with the knowledge and consent of the seller. A secret interest in a transaction, or a secret agreement as to profits on a resale is treated as a violation of an agent's duties.

RIGHTS OF BROKER.—A broker, acting in good faith, and having been employed, is entitled to a fair opportunity to carry out the object of his employment. An owner cannot arbitrarily terminate an employment in order to avoid payment of a commission. However, an employment of a real estate broker is usually not for a definite time, and if the owner acts in good faith he can terminate it at will. A broker being given a fair chance to bring about a transaction, and failing to do so may have his agency terminated and thereafter the transaction in connection with the property may be brought about between the principals; and if they have acted in good faith, the broker, having been discharged, will have no claim for commission. All of the circumstances of the case would be taken into consideration in determining whether the broker had had a fair opportunity and that the principal had acted in good faith in discharging him.

The broker is entitled to rely on statements made by his employer and represent them as facts to a prospective purchaser. If a contract is induced by these statements and they afterwards prove to be untrue, the broker is still entitled to his commission. He acted in good faith relying on his employer's statements and accomplished that for which he was employed.

EARNING COMMISSIONS.—The general rules as to earning a commission are stated by "Gross on Real Estate Brokers" and are as follows: (1) show that he was employed; (2) be the procuring cause of the sale; (3) bring about the deal on the terms of his employer; (4) act in good faith; (5) produce an available purchaser who, under the general rule, is ready and willing to purchase and also legally able to do so; (6) bring about a completed transaction. Under some circumstances a broker can recover a commission by showing that he was the procuring cause of a sale. In every case, employment must be shown. That being a fact, if it can be demonstrated that efforts of the broker, such as advertising the property or offering it to the buyer, resulted in a sale, the broker's commission has been earned, even though he did not actually bring the parties together at the time the transaction was made.

WHEN COMMISSIONS ARE PAYABLE.—A commission becomes due and payable to a broker as soon as he accomplishes the object of his employment. If he is acting for a seller, his act of bringing to the seller a purchaser ready,

illing and able to buy the property on the terms stated by the seller would ntitle the agent to claim a commission. If the terms offered by such a purhaser were not those originally stated by the seller, but were such terms as he as willing to accept, the broker's commission would be earned. It is not necesary that a contract between the principals be drawn and signed, although written contract is the best evidence that a broker can produce to show that he transaction had been brought about. The broker's claim for commission loes not depend upon a signed contract. A contract may never arise, for there nay be circumstances under which the seller would refuse to sell, even after mploying the broker. In such cases if the broker's party answers the description of a ready, willing and able purchaser, the commission can be claimed.

It is not necessary that a broker defer the claim for his commission until the losing of title under a sales contract, and it is usually not considered good usiness for a broker to so defer his claim. There may be cases, however, that would be exceptions to this rule, such as contracts containing conditions that might prevent a final closing of the sale, and contracts under which the seller ccepts a lower price or a smaller deposit of earnest money, or more generous erms. As a condition to his acceptance of the altered conditions the owner may ave asked that the agent defer his commission. Such an agreement, if made y the broker, would be legal and binding on him, for it would be made for a onsideration, that is, to induce the owner to enter into a contract at a different rice or terms than originally contemplated. However, if the broker has done hat for which he is employed and without any consideration such as altering he terms, his agreement to defer payment of his commission would not be inding upon him. A statement made by a broker in which he ostensibly agreed o take a smaller commission, would not make an agreement binding upon im. Because of lack of consideration such agreement could not be enforced.

TERMINATION OF AGENCY.—The agency can be terminated at will y either party, or after the lapse of a reasonable period of time the agency may e deemed to have ceased. It is terminated by death or insanity of either party, lso by bankruptcy or by the destruction of the property. It is usually understood, except in the case of an exclusive agency, that an authorization to sell s subject to prior sale and a sales transaction, therefore, terminates the agency.

COMMISSIONS ON EXCHANGES.—In an exchange each principal is a urchaser and a seller at the same time. A broker may represent one or the other ide, and very often represents both sides. However, under the rule previously tated, he has no right to represent both sides unless it is understood by all f the parties. As there is often a large variation in the values of the respective arties, two or more brokers, in an exchange transaction often pool commissions nd divide them. The principals may pay agreed amounts of commission rather han a percentage of the arbitrary values stated in the contract.

COMMISSIONS ON LOANS.—The broker's commission in a mortgage oan transaction is **paid by the borrower.** His employment is to procure a loan f a definite amount and on specified terms on a piece of property. He becomes ntitled to a commission upon accomplishing the object of his employment by btaining an acceptance of the loan by a lender. If the borrower fails to take he money when it is made available for him by the broker he is nevertheless able for the broker's commission.

MANAGEMENT OF PROPERTY BY AGENT.—Management is a **branch f the broker's business.** In managing real property the broker acts as an gent of the owner for the purpose of securing tenants, collecting rents, making epairs and otherwise taking the place of the owner in the active management

of the property for the purpose of procuring an income from the property. The broker's skill and experience in making rentals, in managing all of the various details and the operation of the building, in keeping the building in sound condition, at the same time having the financial returns adequate, comprise his duties and he is paid for doing this. His compensation for management is a **percentage of the gross rents collected.** He may also, if he secures tenants and makes leases, obtain a commission on the gross rent called for by the lease.

RATES OF COMMISSIONS.—The amount of commission to which a broker is entitled is frequently based on a specific agreement between the broker and the principal. Real estate boards in various parts of the country have established the proper amount to be charged by brokers on various transactions, and it is usual that the agreed amount be at the established rates. In the absence of any agreement the amount that may be claimed by the agent is the one that is customary in the community for similar services, and the best indication of the customary amount is that computed at the rate fixed by the local real estate board.

Financing Real Estate

BORROWERS ON REAL ESTATE.—The ownership of real estate (land, buildings, and interest in them) is desirable and advantageous to many people. Owners of it, however, find that they must frequently borrow money on it, that is to say, they use it as security for mortgage loans. **Mortgage loans** are desired by a variety of owners, and for various purposes. The **ordinary home owner** is a borrower. Probably a majority of these would not own their own homes had they to pay for them in full in cash. Frequently, only a small proportion of the purchase price of a home is paid in cash, the balance being represented by one or more mortgages. The **first mortgage** is likely to be more or less permanent, especially if held by an institution of some kind. **Second or subordinate mortgages** are usually payable in installments over a period of years. The great value of the mortgage loan to the home owner is the opportunity given him to become an owner as soon as he has secured the initial payment. The investor finds that mortgages of this type may be classed among his very best investments.

Builders are large mortgage borrowers. By builders reference is made especially to what are known as speculative builders. These are the people who improve communities with new homes, apartment houses, and business buildings. The builder's operation must be financed for him; he seldom builds entirely with his own funds. He borrows money in the form of first mortgage loans on his buildings from private parties seeking investments, or from some of the great lending institutions. If the lender advances him the money as the building goes along to completion, the mortgage is called a **building loan mortgage.** In some cases the builder secures a second as well as a first mortgage. The second mortgage may represent cash invested by some one, or it may represent part or all of the purchase price of the land on which the building is being erected. The latter case is an example of **selling with "subordination."** Sales of lots with an agreement to furnish building loans and to subordinate all or part of the purchase price of the land, is called **selling with "terms."**

ADVANTAGES OF BORROWING.—Operators and investors find it advantageous to obtain mortgage loans. The **operator**—one who deals in land as stock in trade—can handle more property with his own capital investment

by borrowing a large proportion of the value of each parcel. His percentage of profit on his turnover will increase by reason of his borrowing, as the profit will be made on a comparatively small investment. The **investor**—one who intends to hold real estate for income—can often increase his income by mortgage borrowing. For **example,** suppose he owns a building costing $100,000 free from all mortgage debt. The gross rental is $15,000, the expenses—taxes, repairs, etc.—$7,000, leaving net income $8,000, or 8% on his investment of $100,000. Assume that he borrows from a savings bank on a first mortgage loan on the property $50,000 at 5½%. The annual interest charge of $2,750 will reduce net income to $5,250, but the investment of the owner in the property is now only $50,000, so that the rate of return has increased to 10½%.

In many parts of the country **farmers** are large borrowers. They may borrow to buy the farm, or to improve it with buildings, or to purchase live-stock, machinery, fertilizer, or seed. Banks formed under the Federal Farm Loan Act have assisted greatly in loans to farmers, and there are many other agencies for making farm loans.

BUILDING LOANS.—A building or construction loan, as it is sometimes called, is a loan made to finance the improvement of real property. It is usually secured by a **building loan bond and mortgage.** These instruments are in much the same form as other bonds and mortgages. They may, however, contain a reference to the building loan agreement which has been made between the parties. Such agreement is required under the provisions of the Mechanic's Lien Law of New York, which states that an agreement for a building loan must be in writing and must be filed in the office of the clerk of the county in which the property is located within ten days of execution. The purpose of the law is to protect those who may furnish material or perform labor in connection with the contemplated building, and it is desirable that they should know the amount of the building loan, its terms and provisions, and the manner in which the principal of the loan is to be advanced to the owner of the land. The **building loan agreement** contains the names of the parties, the amount, rate of interest and due date of the loan, the description of the property, a statement of the kind of building to be erected, a schedule of payments, and various other agreements and conditions.

The schedule of payments sets forth at what times and in what amounts portions of the loan shall be paid by the lender to the borrower. The **time of payment** is described as the various stages of construction, as "enclosure," "brown mortar," "white mortar," "standing trim" and "completion." The amounts to be paid may be stated as definite sums, or in the form of percentages of the total loans. Often no definite schedule is agreed upon, the statement being that the loan shall be advanced at such times and in such amounts as the lender may approve.

Other conditions of the building loan agreement are to the effect that the building shall be erected in accordance with the plans and specifications agreed upon, that construction shall be of good and workmanlike character, that it shall proceed continuously (sometimes limiting time of completion); provisions with regard to the title to the property, removing prior liens, inspections by representatives of the lender, notice required before payments can be demanded, and many others.

BUILDING LOAN PRACTICE IN NEW YORK.—A great many new buildings, especially in the large cities, are financed by building loan mortgages. Cities have been built up to a great extent by speculative builders, and financing the builders is an important and necessary part of the mortgage business. A

lender making building loans has submitted to him applications containing, among other things, a description of the property to be mortgaged. The application is accompanied by a specification and a set of plans of the proposed building. The lender appraises the land; he also figures the plans to ascertain as near as possible how much the building will cost. To the value of the land and the cost of the building, he may add an additional amount as builder's profit, the total being the estimated market value of the property on completion of the building. On these figures he will base the amount of the loan he will offer the builder.

Figuring the **plans to determine estimated cost** consists of computing the cubic contents of the building, or the number of feet of floor surface, from the dimensions shown on the plans, and applying to the result a certain factor. This factor is based on what is known to be the cost of similar buildings under existing market conditions. To **illustrate,** suppose the plans for a building show dimensions of 50′ x 70′ on the surface and a height of 52′. The cubic contents are 50′ x 70′ x 52′ or 182, 000 cubic feet. An examination of the specification will show the quality of construction required of the contractor. Say that from experience it is believed that the building will be one similar to those costing 35 cents a cubic foot to construct. The factor then is 35 cents, and the resultant cost, estimated, is $63,700. Putting the land at $20,000, the total cost of land and building would be $83,700. To this total might be added a figure to cover carrying charges during construction, and also a figure to represent the builder's profit. The final figure may be considered the estimated sales price.

The proper **proportion of value** that may with safety be **loaned** on a building loan mortgage is a matter of individual judgment. The legal limit for savings banks in New York State is 60%, but when costs are above normal the loan will probably be only 50% or less of sales price. Other institutions lend a greater proportion of value than do savings banks, and apparently with much success.

Payments are advanced on building loan mortgages as the building progresses towards completion. Practice differs as to the percentage of the total loan to be given the builder at the various stages of construction, but taking an average, it will be found that about 50% of the loan is made at "enclosure," or on a large building in various amounts which will aggregate 50% at enclosure; further payments are made at "brown mortar," "white mortar," "standing trim" and "completion." There are frequent exceptions to a schedule like the one indicated, either for the purpose of giving more payments at intermediate stages, or for limiting the total number of payments to two or three in all.

Searches of the title are made at or prior to time of first advance on a building loan mortgage, and are continued to the date of each advance at the time such advances are made. The object of the title search is that the lender may know that the mortgage is being made by the proper parties and that defects and prior encumbrances are disposed of to his satisfaction. Continuations of the search at the time of making future payments are for the purpose of seeing that no other claims, liens or interests have intervened.

Prudent lenders find it advisable to have a system of **inspection of the buildings** upon which they are advancing money. It is always important to the lender that the plans and specifications are being faithfully followed, and that all work is being done in a good and workmanlike manner. Advances are made when the builder is entitled to them, that is, when the building is up to the required stage, and all work usual at such stage has been done.

GUARANTEED MORTGAGES.—A guaranteed mortgage, as the term is usually used, is one made by an owner to a lender, and sold by the lender to an investor with the guaranty of the lender added. The guaranty is to the effect that the principal and interest shall be fully and promptly paid in accordance with the terms of the mortgage. The **agreement of guaranty** may take one of several forms as follows:

1. An endorsement of guaranty on the bond.
2. A covenant of guaranty contained in the assignment from lender to investor.
3. A separate instrument containing an agreement of guaranty. This is often called a mortgage guaranty policy.

The third of the foregoing methods is the one in use by the large title and mortgage companies in New York. The policy used by these companies contains certain covenants and provisions which govern their agreement of guaranty. Briefly, the guarantor is the agent of the investor for the collection of both the principal and interest on the mortgage, payment of interest to the investor being at the rate guaranteed, the difference, usually ½%, between the interest collected and that paid over being the premium or fee for the guaranty. At maturity the guarantor is allowed 18 months in which to collect the principal. This is a wise and necessary provision for the guarantor, although not often availed of. The guarantor sees that the premises are insured against loss by fire, usually keeping the fire insurance policies in its own possession. He also sees that taxes, assessments and water rates are fully and promptly paid. Legal actions to enforce the terms of the mortgage may be brought in the name of the investor, but at the expense of the guarantor.

MORTGAGE CERTIFICATES.—A mortgage may be split up among a number of investors by means of mortgage certificates, or as they are in reality, participation certificates. A lender may hold a bond and a mortgage which it will sell, it may be with or without its guaranty of payment. Instead of selling the loan to one investor, it issues a number of certificates, which may be of equal amounts or of varying amounts. An investor of $100, $500, or $1,000 will purchase a mortgage certificate of the desired amount. The certificate is in reality an evidence of the ownership by the investor of a participating share in the bond and mortgage against which it is issued. Frequently, the bond and mortgage is **assigned to a trustee** to hold for the benefit of all the certificate holders. The certificates are in such event authenticated by the trustee, who certifies that they are each part of all the certificates issued against the bond and mortgage it holds.

Mortgage participations may take other forms than that of the certificates just described. The certificates are usually co-ordinated in rank. By agreement participating interests in a mortgage may be assigned different ranks, as, for example, in the case where one investor takes a share in a mortgage with the agreement that his share is a prior one, that is, it shall have a first claim on the property. The holder of the balance of the mortgage debt is then in the relative position of a second mortgagee. He is paid his share only after the holder of the prior participation has been paid in full.

MORTGAGE BONDS.—An owner of real property in borrowing money may give a bond secured by a mortgage, both of which are to be held by the lender. A mortgage may, however, be made to secure a number of bonds or a series of bonds, and the separate bonds may be sold to different investors. Such bonds are called "mortgage bonds," or suiting the case, "First mortgage bonds" or "second mortgage bonds." They may be all of the same amount,

as, for instance, an issue of 1,000 bonds of $1,000 each, secured by a mortgage of $1,000,000 covering certain real estate. It is not necessary that each bond be of the same amount. Some may be $100 bonds, some $500 bonds, and others $1,000 bonds, but in the aggregate they will be for not more than the amount of the mortgage which secures the issue. A mortgage given to secure a bond issue is called a **trust mortgage,** and is held by a trustee who acts in the interests of all the of bondholders. The mortgage sets forth the provisions for the payment of principal and interest on the bonds, as well as other terms and conditions, including the rights and duties of the trustee, the bondholders, and the owner of the property.

Mortgage bonds may be in registered or coupon form. Each bond should be executed by the borrower, and should bear the trustee's endorsement showing that it is authentic and one of the total issue described. Sometimes there is a further endorsement of guaranty by some other person or corporation. It should be recognized that a reputable trustee does not make a bond a safe investment. The bond is good, that is, safe, if the property covered by the mortgage securing the bond is of sufficient value to afford full protection. Prudent investors will see that there is ample equity in the property over and above the total amount of the mortgage bonds. The guaranty of a reputable mortgage company adds to a bond's attractiveness. Mortgage bonds often become due serially. Every bond paid and redeemed makes the remainder of the issue better by the reduction of the total mortgage debt.

COLLATERAL TRUST BONDS.—A number of bonds and mortgages covering various parcels of real estate may be deposited with a trustee. Against such mortgages there will be issued a series of bonds, the total being not more and often less than the total amount of mortgages deposited. These bonds are not strictly mortgage bonds, in that they are not directly secured by a specific mortgage, but are called collateral trust bonds. They are authenticated, and sometimes guaranteed in much the same way as is the mortgage bond.

DEBENTURE BONDS.—A debenture bond is nothing more or less than an unsecured promise to pay. The fact that it is issued by a real estate concern does not make it a mortgage bond. There is a wide difference between a mortgage bond, secured by a mortgage on a definite piece of property, or a collateral trust bond secured by a number of mortgages, and a debenture bond. The value of the last mentioned depends entirely on the strength and solvency of the maker.

FEDERAL FARM LOAN BONDS.—The Federal Farm Loan Act divides the United States into twelve districts, in each of which is located a Federal Land Bank. Corporations known as **National Farm Loan Associations** may be formed in any community by ten or more citizens. The members shall be those who wish to borrow sums aggregating not less than $20,000. They subscribe to stock of the Association in the amount of 5% of the loan applied for. Applications for the loans are made by the Association to the Federal Land Bank of the district.

Under the provisions of the Act, the loans must be secured by first mortgages, and shall be for not more than one-half of the value of the land, and 20% of the value of the improvements. The proceeds of the loan must be for certain definite purposes, either to pay existing indebtedness or for productive purposes. The mortgages must be paid in installments over a period of years, and the installments shall be large enough to fully pay the loan in 40 years, but not greater than to pay it in 5 years. There are certain other requirements specified by the Act.

Federal Land Banks commence business by issuing capital stock, the United States government being at the start the principal stockholder. The government, however, is paid off as other capital comes into the bank. When a Land Bank has accumulated a sufficient number of farm mortgages, made through local associations as has been described, it has the right to issue **Federal Land Bank bonds.** There is a procedure for doing this which includes the pledge of the mortgages with a Registrar and the approval of the bonds by the Farm Loan Board at Washington. The bonds are sold to the public, thus placing the Land Bank in funds and enabling it to make additional loans. By the method contemplated by the Act, funds flow from investors all over the country into mortgages on farms by means of the Federal Land Bank bonds.

Under the provisions of the same law, **Joint Stock Land Banks** may be formed. The capital of these banks is entirely private capital, the banks being formed by groups of bankers or other business men. There is federal supervision of the loans made, and a provision for the **issuance of bonds** which have much the same features as the bonds of the Federal Land Bank. By some they are considered to be better bonds because of the feeling that the bankers operating a Joint Stock Land Bank exercise greater care and discretion in making loans than employees of Federal Land Banks.

BUILDING AND LOAN ASSOCIATIONS.—A building and loan association is a mutual or co-operative association formed to develop thrift and to assist in the building of homes. Deposits are made by members of the association in the form of **payments for stock.** A member subscribes for a certain number of shares and agrees to make monthly payments on these shares. The money received by the association is invested in mortgages, and the earnings are used to pay the necessary expenses of operation and a portion put aside for surplus account, the balance being paid over to the members in the form of dividends. Monthly payments on the shares, plus the dividends credited, go toward maturing the shares, so that when the shares mature, that is, when the total credits of payments and dividends equal the principal amount, the member is entitled to draw the face amount of the shares in full.

The shares of a building association are of several different kinds. Some are purely **investment shares,** the money being paid in for the purpose of receiving dividends. Some shares are purchased with the idea of borrowing money on a house. In the latter kind, the member purchases shares of a par value in amount equal to the loan he gets from the association. The borrowing member is charged with interest on his loan, and is credited with his payments and dividends on his shares. At the time the shares mature they will be used to offset the amount of the loan, and the loan will thus be paid in full.

Appraisals and Values of Real Estate

LAND VALUES IN GENERAL.—Land outside of communities is used for agricultural, grazing, mining and timbering purposes. Land in which mines are located and land having a growth of standing timber need not be discussed in connection with land values, as it is the mineral or the timber that has the value, not the land itself. **Agricultural land,** that is, land used for farming purposes, has a valuation based very largely upon the value of the crop. However, it is difficult to lay down rules for valuing agricultural land, inasmuch as there are so many factors affecting it. The most fertile or productive land can be said to have the greatest value, and fertile or productive land nearer to transportation has a larger value than that more remote. The value of farm

land at any given time is perhaps best measured by the price farmers are willing to pay for it. In the South planters will pay so much per acre for land on which to raise cotton, and in the West they may pay so much per acre for land on which to raise wheat. If the price of the product is high, farmers may be expanding and land will be salable at a fair price; if farmers are not making money on their crop, they will not be taking up more land, and farms will not be readily sold, nor will they produce a good price.

URBAN LAND VALUES.—Land in cities and other communities has value chiefly because of the fact that buildings can be erected on it. If improved with a suitable building, a rental may be obtained that pays a return, not only on the cost of the building but on the value of the land. The value will be measured by the amount of rent. If from the net rental of a piece of improved property is deducted an amount representing a fair return on the cost of the building, the balance of income may be considered to be **ground rent.** This is sometimes called "economic rent."

Location is the important factor in determining rent, and is therefore the thing that makes value. A choice plot in a retail store section has a large value because a large rent can be obtained from tenants of a building located in it. To illustrate this, assume a small store building erected at a cost of $10,000, and producing a net rental of $1,000 a year. If $700 is taken as representing a return at 7% on the cost of the building, the balance of $300 would represent ground rent. This capitalized at 6% gives a valuation of $5,000 for the land. Now assume the same building costing $10,000 is erected in a better location and producing a net rental of $2,500 per annum. Taking the same figure of $700 as the return from the building, the balance of $1,800 being ground rent, would represent 6% on a land valuation of $30,000. The point to be emphasized is that the buildings being exactly alike, the difference in rent is due entirely to location, and that the ground rent capitalized gives an approximate land valuation.

It will easily be seen that locations producing the largest ground rent will be the most valuable. In cities, land in the financial section is the most valuable because of the fact that the most profitable business is conducted at such location in spaces of small dimensions. Possibly the next most valuable land is that used for high grade retail stores, then comes high class residential property, land used for hotels, residential apartments, land used for wholesale business, then that used for the ordinary tenement houses, private dwellings, factories, etc.

VALUES IN EXCHANGE.—The price being paid for land in communities is often taken to be the measure of its value. In the long run, this value, which is called "value in exchange," will be equivalent to the value based on the rent capitalized. The **ground rent capitalized** is, however, more or less theoretical, and an expert in giving an opinion of value will endeavor to base his valuation upon actual sales of similar land. Sometimes in new communities, or in sections of the city in the course of development, prices will be paid for land that would not be warranted by present rentals, but the price is paid in anticipation of future rentals, discounting the future to some extent.

UNIT OF VALUE.—Farm land is valued by the **acre.** In some communities land values are measured by the **square** or by the **front foot.** In many places, however, the unit of value is a **lot of standard size.** This is called the "standard" or "typical" lot of the community. In reaching a valuation of a given plot of land in a community, the appraiser seeks to ascertain as the first step, the unit

f value and then the actual value of a standard lot. He can then compare nd appraise his lot accordingly.

NUISANCES AFFECTING VALUES.—A standard lot is valued as being n grade and having no unfavorable soil conditions. Land much above grade, r much below grade, rock requiring expensive excavation, soft or muddy soil, ll detract from value. Nuisances in the neighborhood will adversely affect alues. These nuisances may be noisy or offensive manufacturing plants. f the land is suitable for residential purposes, a quiet and well-kept block n which a good quality of residence has been erected, will have a greater value han a lot on another block where living conditions are not so favorable. **Transit acilities,** both existing and proposed, should under ordinary conditions have a favorable effect on values.

Lots of Irregular Shape.—The **value of a standard lot** is based on lots of the usual or ordinary depth and rectangular in shape. An adjustment of value may be made for **lots of less or greater depth or of irregular shape.** There can

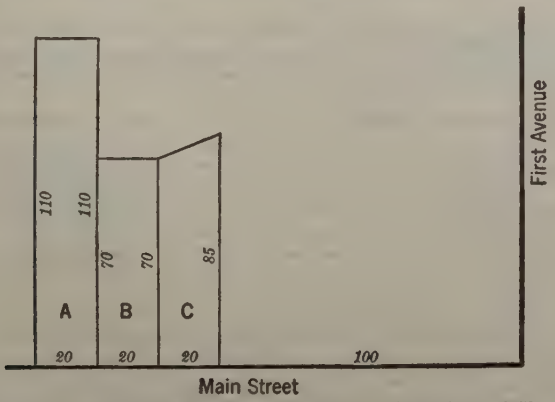

FIG. 3 Diagram Showing Lots of Different Lengths and Shapes

e no arbitrary rule by which to fix with exactness the value of these lots which vary from the standard lot, but **tables** have been constructed which give us a fairly accurate working basis. These tables are **based on experience** with numerous real estate transactions. The oldest one is known as the **Hoffman rule;** the one used by the Tax Department of the City of New York, s known as the **Hoffman-Neal rule,** and another, which is perhaps the best known, is the **Davies rule.** These rules, however, have merely to do with the valuation of lots of less or more than the standard depth. In computing the value of a lot shaped like a triangle, or whose sides run parallel, or whose rear ine is not parallel with the front line, the average depth or the average width s computed. The diagram in Fig. 3 will serve as an illustration. Assume that standard lot is 20′ in width by 100′ in depth, and has a value of $2,500. Using he Davies rule, Lot "A," which is 110′ in depth on both sides, has a value quivalent to 1.05698, or $2,642.45. Lot "B" has a depth of 70′ on both sides, nd using the Davies rule, is worth .80649 of the standard lot, or $2,016.22. ot "C" is 70′ deep on one side and 85′ deep on the other side, an average

depth of 77′ 6″. The Davies rule for a lot of 77′ 6″ in depth gives a ratio of .85117, and the lot should, therefore, be worth $2,127.92.

CORNER LOTS.—A lot located on a corner has the advantages of both streets on which it fronts. It is considered more valuable and there are a number of reasons for giving an extra value to it. A larger building can usually be erected on a corner lot than on an inside lot. If it is a location suitable for stores, larger rent can be obtained for a corner store than for an inside store. Corners are often the intersection of a very important street with an ordinary side street. The relative value of the corner depends on the importance of the intersecting street or avenue. A **usual rule** is to add to the value of a standard lot facing on a particular street an additional 50% to determine the value of a corner lot. In some cases corners are not worth 150% of an inside lot, and in some locations, they are worth much more than 150% of the inside lot.

The lot next to the corner is supposed to have a benefit because of its proximity to the corner. This proximity is known as "corner influence." Ten per cent is often assigned as added value to such lots.

PLOTTAGE.—Where two or more lots are together in one ownership and form a plot, there is an **added value** because of the plottage. This is by reason of the fact that the larger plots can be improved to better advantage than single lots. The **usual rule** for plottage is to take the total of each lot valued separately and add to it 10% for plottage.

VALUATION OF BUILDINGS.—A building is worth its **cost to reproduce** if it is the proper improvement for the location. The first thing to determine the value of a building is whether or not it is an **adequate improvement for the land.** If it is an adequate improvement, that is to say, an improvement which will produce the greatest amount of rent for the location, it is safe to add to land value the estimated cost of reproducing the building.

Many buildings are of value and yet are not the adequate improvement for the land. As to these buildings, the amount that the building adds to the land value is assumed. In other words, the land by itself will have a value and the land and building taken together will have a value, the difference between the land value and the total value being the amount the building adds to the land. Buildings do not improve with age, and it is often necessary to figure something for **depreciation,** even when the type of building is suitable for the location. There are many instances in which the building value entirely disappears; that is, the land becomes so valuable that nothing can be done with the building but tear it down to make room for a better structure. This is so even when the building is a substantial one and is rentable. In these cases the building value is said to have merged in the land value.

FIGURING BUILDING COSTS.—The cost of a building is estimated by computing the number of **cubic feet of space** within the walls of the building, and applying **a factor** of cost to the result obtained. Reference to this method has already been explained in the discussion of building loans. Oftentimes a building will be valued on the basis of the **number of square feet of floor surface** of the particular building. That is to say, a building having dimensions of approximately 50′ in width by 80′ in depth would have 4,000 square feet of surface for each floor. If it is a four story and cellar building there would be five times the number of feet per floor, giving 20,000 as the total number of square feet of floor surface in the building. A unit of cost is applied to this total.

Naturally the cost of producing a building changes with conditions in the building trades. Buildings in 1925 are costing about twice as much to produce

as they did in 1914. A higher unit of cost must, therefore, be used today than formerly. What the cost will be in the future it is impossible to foretell. A person dealing in real estate must be familiar with these conditions in order to accurately determine building values.

A table showing the relative cost follows:

Cost per unit of Cubic Feet

	Pre-war	1925
Frame dwellings	$.14–$.18	$.28–$.35
Brick dwellings	.15– .19	.26– .40
Cold water flats—brick	.12– .15	.28– .32
Steam heated non-fireproof apartments	.19– .22	.30– .40
Fireproof elevator apartments	.30– .35	.45– .65
Non-fireproof loft buildings	.10– .15	.20– .25
Fireproof loft buildings	.25– .30	.28– .35
Hotels	.35– .50	.65–1.00
Office buildings	.45–1.00	.50–1.50

Values Determined by Rents Capitalized.—The value of an improved piece of land can often be roughly estimated by taking the gross rents, using the rents of the building fully rented at current rental prices. The following table will show about the gross rent that should be obtained from buildings of different types:

Dwellings	12%
Cold water flats	12% – 15%
Steam heated flats	15% – 20%
Elevator apartments	16% – 20%
Loft buildings	15% – 20%
Office buildings	15% – 20%

SECTION 20

TRAFFIC MANAGEMENT

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SECTION 20

TRAFFIC MANAGEMENT*

The Traffic Department

NECESSITY FOR A TRAFFIC DEPARTMENT.—In recent years a new line of endeavor known as **commercial traffic management** has developed. The underlying cause of this development is the growing complexity of modern transportation due to the size of the United States as well as the differences in topography, climate, density of population and production of the various sections. The products of one section, either in their raw or manufactured state, must be transported to other sections for fabrication, distribution and consumption. In order to transport these products the nation is traversed with **railroads** over which pass train loads of merchandise. **Steamships** ply between seaports in coastwise and intercoastal trade. A large fleet of vessels operates on the Great Lakes. The highways are thronged with motor trucks and other vehicles of many shapes and descriptions, busily engaged in transporting freight. In addition, there is the **express service,** available for quick transportation, and the **parcel post service** which reaches more places than any other transporting agency. The **aeroplane** has entered into traffic. It is successfully transporting mail and express matter as well as passengers. The experiment of using it as a freight carrier is in process and in all probability it will become a growing factor in freight transportation.

The transportation companies are continually making **rate adjustments.** They have created classification committees and rate bureaus for the purpose of making exhaustive studies in order to determine and valuate the factors affecting rates on an almost countless variety of commodities to enable them to issue tariffs containing reasonable and equitable rates.

Transportation has also been affected by continuous **state and federal legislation.** From time to time laws regulating commerce have been placed on the statute books. The railroads have been required to formulate and publish a great many rules and a vast number of tariffs. The situation has grown into a labyrinth of technicalities which has become so complex that as a result, every shipper, small or large, should know something of transportation or have a traffic department under the management of a competent traffic man to handle his traffic affairs.

An efficient traffic department is a large factor in **effecting economies.** It may have its accounts kept separately. It may be debited with all expenses incurred for its maintenance, such as salaries, portion of overhead charges and losses sustained in transportation; and it may be credited with its so-called

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earnings, such as rate and classification adjustments obtained, claims collected, etc. It may show a considerable credit each year. It may earn also a large but invisible profit by intelligent shipping, by making use of proper packing and suitable containers, as well as routing shipments correctly, thereby avoiding the need of making many claims for shipping errors, to say nothing of the customers who are kept pleased and satisfied with deliveries.

SIZE OF TRAFFIC DEPARTMENT.—An industrial traffic department is usually developed from a small beginning solving its problems in its own way as the business grows. It must be built to fit the business. There are no two traffic departments organized exactly alike, possibly for the reason that industrial traffic leads into realms that have not been fully organized or coordinated, and also because industries are so varied, and are concerned with the transportation of so many different kinds of commodities.

The **size of a traffic department** and the completeness of organization required depend principally upon the character and volume of business, the variety of commodities handled, the quantities in which shipped, and the extent of territory in which they are distributed. If a business is extensive and diversified, a systematized traffic department is necessary. Where, however, the business is large in volume, but with little detail, a small organization suffices. For instance, a concern may ship monthly many thousands of tons of a certain commodity in carload lots, in which case a very small traffic force could handle all the traffic work. One competent traffic man may constitute an effective traffic department. On the other hand, a concern which ships only a hundred tons a month of different commodities in various small quantities might require quite an extensive traffic force to handle the many details.

PURPOSES OF TRAFFIC DEPARTMENT.—The department should accomplish the following:

1. It should protect the company from loss by complying with rate and classification requirements so as to obtain proper rates; by paying only the tariff rates; eliminating waste transportation in distribution; by reducing the number of mistakes; by guarding against delays that may result in closing down plants, or great loss due to penalty contracts or fall in market prices; by obtaining adjustments of unreasonable or unjust classification ratings and rates; by collecting just claims.

2. It should bring about economies by reducing the cost of shipping, loading and drayage.

3. It should obtain better service by proper packing, intelligent shipping, loading and routing.

4. It should establish cordial relations with carriers by manifesting a spirit of co-operation and maintaining a reputation for fair dealing.

THE TRAFFIC MANAGER.—In the past decade the position of traffic manager has become one of considerable importance and responsibility. A competent traffic man is actually **a transportation engineer** who must also possess a high degree of diplomatic and executive ability. He is the transportation representative of the shipper in all dealings with the carriers and has full control of the shipping policy of his concern. He is consulted in selecting places where plants are to be located, where branch houses are to be established, and in the division of territory for the purchasing department. He is also called on to furnish traffic information for the salesmen.

The population of the country is still increasing and expanding, and production centers and sales routes are continually changing. In the location of

additional manufacturing or distributing plants the territory to be served and the sources of raw material must be given most careful consideration. A traffic man who possesses a broad knowledge of all the elements that enter into transportation can solve such problems satisfactorily and prevent waste in transportation.

A traffic manager should possess the following **qualifications:**

1. He should know the country in general and have a clear concept of the **geography** of the United States. He should be so familiar with the **railroad map** of the country that he can trace the main lines of the important roads and know the most direct routes.

2. He should know the **individual merits of the various railroad systems,** their workings with each other, their connections and junctions, as well as the locations of the larger railroad centers.

3. He must have full **knowledge of rates,** their construction and application, the classification affecting the commodities he handles or ships, and the general **traffic rules** relating to switching and demurrage.

4. He should be familiar with the important parts of the **Interstate Commerce Act,** including the decisions of the Interstate Commerce Commission and the courts.

5. He should understand the rules of practice before the Interstate Commerce Commission, and be capable of appearing before it to present in the proper manner his petitions for reparations.

6. He should be familiar with such instruments as bill of lading contracts, bonds of indemnity, assignments, and should know the freight claim rules.

7. He should be a man who has traveled sufficiently to know the location of the lines he uses, as well as the railroad officials with whom he does business, and should know the proper channels through which to handle the different traffic matters.

8. He should possess a high degree of diplomatic ability, breadth of understanding and honesty of purpose.

Bills of Lading

CARRIER'S LIABILITY.—All shippers should be thoroughly familiar with the uses of the bill of lading and with the conditions printed thereon. It is a **contract** made between shipper and carrier in which the latter agrees to transport goods for the former under certain specified conditions limiting the carrier's liability. But the shipper has the option of refusing to ship property under the bill of lading conditions by paying a rate 10% higher (subject to a minimum increase of one cent per one hundred pounds) than the rate charged for like kind of property shipped subject to the bill of lading conditions. Under this arrangement a shipper may ship property at the carrier's risk limited only as provided by common law. In allowing this option to shippers the carriers are permitted to limit their liability, which they could not do otherwise. However, it is not usual for shippers to ship property at carrier's risk.

There are **three kinds of bills of lading** used in domestic transportation of freight, each serving a special purpose, and they are described as follows:

THE "STRAIGHT" BILL OF LADING.—In this document it is stated that the goods are consigned to a specified party. It is **not negotiable,** and the words "non-negotiable" are printed thereon. On delivery of property to the

carrier for transportation, this bill of lading is signed by the receiving clerk whereby it becomes the shipper's receipt for the goods. The bill of lading should be forwarded by shipper to consignee. It is not required that the consignee should surrender the bill of lading covering a "straight" consignment to obtain delivery, but the presentation of this document enables the consignee to identify himself and greatly facilitates securing prompt delivery. The straight bill of lading is used when shipping goods to consignees who have paid for them, or whose credit has been established. Most shipments are made on straight bills of lading.

THE "ORDER" BILL OF LADING.—In this document the property is consigned to the order of the party named therein, and the name and post office address of the party to notify on arrival of the consignment at destination must always be written on it. The order bill of lading is **a negotiable document** which must be endorsed, either in blank or to a specified party, by the party to whose order the goods named therein are consigned before delivery can be obtained. Through failure on the part of shippers to endorse the bill of lading annoying delays, unnecessary trouble, and sometimes extra expense are incurred. The carrier will not deliver an "order" consignment without surrender of the original bill of lading properly endorsed. Where the bill of lading is not endorsed, or has been delayed or lost, arrangements may be made with the proper official of the carrier, usually the general freight agent or division freight agent, to deliver the property by executing an **indemnity agreement,** secured by a certified check for an amount equal to 125% of the invoice value of the property, or by a bond of indemnity acceptable to the carrier for twice the amount of the invoice value. When "order" shipments are frequently received by concerns who wish to avoid delay in obtaining delivery because of lost or delayed bills of lading, arrangements may be made with carriers to file **blanket bonds** which are satisfactory to the carriers as to surety, amount, and form.

The order bill of lading is most frequently used when shippers desire to collect the invoice value of the property covered thereby prior to delivery. When this method of consignment is employed, shippers usually consign the goods to their own order, and after the bill of lading is signed by the carrier, it is endorsed and forwarded, with invoice and draft attached, through the bank in which the shipper deposits, to be delivered to the purchaser of the goods against his acceptance of the draft. This method of consignment also enables shippers at distant points to collect from the home bank, the invoice value of the property as soon as the bill of lading is signed by carrier's agent when the shipper's credit and bank standing warrants the accommodation. Many shippers would not be able to finance their business without this **method of quick collection.** The use of an order bill of lading does not reflect on the financial standing of the party who negotiates the document as "order" shipments are frequently made to concerns of the highest financial standing. For instance, a shipper of flour in the West, or a shipper of fruit on the Pacific Coast, may forward large quantities of commodities to the East. On obtaining a signed bill of lading from the carrier's agent he sends it to the bank with which he transacts business and attaches thereto the invoice for the value of the property, together with a draft for the amount of invoice, and this amount less discount is immediately credited to his account.

NEGOTIATION BY ENDORSEMENT.—An order bill of lading may be **negotiated by the endorsement** of the person to whose order the goods are deliverable. Such endorsement may be in blank or to a specified person. If endorsed to a specified person, it may be negotiated again by endorsement of

such person in blank or to another specified person. Subsequent negotiation may be made in like manner.

For Example: A shipment is consigned to order of Merchant & Co. Notify Forwarder & Co., 42 Broadway, New York, N. Y.

To endorse the bill of lading in blank, the endorsement should simply read "Merchant & Co.," but if endorsed to a specified person it should read—"Deliver to Forwarder & Co.," or "Deliver to Order of Forwarder & Co." Forwarder & Co. could then endorse the bill of lading either in blank or to the order of Smith & Co., and subsequent endorsements could be made in like manner. The carrier will require the endorsement of the person who surrenders the bill of lading and takes delivery.

THE LIVE STOCK CONTRACTS.—For transporting shipments of live stock, instead of uniform bills of lading, uniform live stock contracts are provided by carriers. The conditions differ somewhat from those contained in uniform bills of lading and contain separate contracts with the men in charge of shipments. These documents are not negotiable.

BILLS OF LADING ACT.—The law governing bills of lading, enacted by Congress, became effective January 1, 1917, and is known as the Bills of Lading Act. Section 22 of this Act is very important because it defines very explicitly the **liability of the carrier,** whose authorized agent has issued a bill of lading for goods to be transported in interstate commerce. In this section it is stated that the carrier is liable to the lawful holder of an order bill of lading who has given value in good faith, relying on the description of the goods in the bill of lading, for damages caused by the non-receipt by the carrier of all or of any part of the goods or their failure to correspond with the description thereof in the bill of lading at the time of its issue. The uniform order bill of lading reads:

> "Received, subject to classifications and tariffs, etc.
> at.....
> from.....
> the property described below, in apparent good order, except as noted (**contents and condition of contents of packages unknown**)," etc.

The law thus requires the carrier to know that the goods described in an order bill of lading are as described. Notwithstanding the clause above quoted and emphasized the carrier is not only responsible for the quantity shown in the bill of lading but also for damages if the goods are not as described in the bill of lading.

Freight Classifications

PRINCIPLES OF FREIGHT CLASSIFICATION.—Railroad companies divide all known commodities into groups or classes and publish rates applicable to the different classes. The **principles which govern freight classification** are primarily the cost of transportation, the risk involved in carrying an article, and the value of the freight. Articles having the same weight and bulk, the same value, and similar characteristics in other respects, are usually assigned to the same class. It is customary, though not uniformly so, to give a lower class rating to articles when shipped in carload quantities than when shipped in less than carload quantities, because the cost per hundred pounds of transporting carload shipments is less than that of transporting less than carload shipments. Classification of freight, to a large extent, has been ascertained by

experience as to operating cost and value of service. The object sought has, in the main, been to establish ratings which will move the largest amount of business at profitable rates.

CLASSIFICATION PROCEDURE.—The present procedure of **classification committees,** when reviewing ratings or establishing new ratings, is to make an exhaustive study to determine with accuracy the elements which affect ratings. These committees are appointed by the carriers. Their duty is to fix the rating which is to be assigned to the several articles embraced in the respective classifications and to determine general rules and regulations. The classifications, however, are always subject to whatever exceptions any railroad or group of railroads may choose independently to put in force. These exceptions are, in many cases, published in the freight tariffs to which they apply and sometimes in separate publications. The same commodity is often placed in two or three or even more classes, according to the manner in which goods are packed, the kind of containers used, and the quantity in which forwarded.

At the present time freight classification is performed principally by **three committees,** known as the Official, Southern and the Western Classification Committees, located at New York, Atlanta, Ga., and Chicago, respectively. These committees combine their classifications in one publication, called the **Consolidated Freight Classification,** issued by the Consolidated Classification Committee at Chicago. This classification contains rules and ratings for the Official, Southern and Western Classification Territories; the rules are nearly uniform, and the commodity descriptions and minimum carload weights are similar; also, in many instances the ratings are identical. The consolidation of the classifications is a progressive step and its merits are quite apparent when it is desired to determine rates applying on shipments moving through different classification territories, as it is necessary to consult only one publication instead of two or three as was formerly required.

CLASSIFICATION TERRITORIES.—A rough definition of the location of the territories is as follows:

Official Classification Territory.—The region north of the Ohio and the Potomac Rivers, east of the Mississippi River, except Minnesota, Wisconsin, and the northern peninsula of Michigan, and that part of Illinois north of a line from Chicago to East St. Louis.

Southern Classification Territory.—The region south of the Official Classification Territory and east of the Mississippi River.

Western Classification Territory.—The region west of the other two territories, the northern peninsular of Michigan and the states of Wisconsin and Minnesota.

CLASSIFICATION RATINGS.—The Official Classification contains six numbered classes and two rule classes: viz., 1, 2, 3, 4, 5, 6, Rule 25 and Rule 26. The Southern Classification contains six numbered classes and four lettered classes: viz., 1, 2, 3, 4, 5, 6, A, B, C, D. The Western Classification contains five numbered classes and five lettered classes: viz., 1, 2, 3, 4, 5, A, B, C, D, E. Each classification, in addition, contains multiples of first class progressing from one and one-quarter times first class to four times the first class.

OTHER CLASSIFICATIONS.—There are a **few minor freight classifications** in the United States, applicable to intrastate traffic in certain states. For the most part even intrastate traffic is governed by one or the other of the three major classifications. The railroads of Canada employ the **Canadian Freight Classification.** Formerly the three major freight classifications were published

separately, but since 1918 they have been published in a single volume, known as the **Consolidated Classification,** which contains—

1. A list of the carriers for which it is published.
2. An index of the rules of the classification.
3. An alphabetical index of the articles classified.
4. The rules of the classification.
5. The classification itself.

EXCEPTIONS TO CLASSIFICATION.—Exceptions to classification, often called **"The Exception Sheet,"** are either published in a separate tariff or are shown in the tariff to which they apply. Exceptions are ratings and rules different from those contained in the consolidated classification. When both the classification and exception sheet are referred to in a tariff as governing the rates published therein, the ratings, rules and regulations in the exception sheet **take precedence** over any contained in the classification, except as may be otherwise specifically stated.

In some of the large agency tariffs it is usually stated in the governing rules that the rates named are governed by the exceptions to the classification of the individual carriers as listed. Therefore, in obtaining rates from a tariff containing a rule of this kind, it is necessary to consult the Exceptions to classification of the individual carrier over whose line shipment is to be forwarded provided it is listed in the tariff as having published an exception sheet. The exception sheet may provide for a different style of package; or perhaps it may authorize exceptions on shipments of estimated weight for a package rather than actual weight; or it may arrange for a different class, generally one lower than that authorized in the classification; or it may prescribe a minimum carload weight different from that named in the classification. But whatever is specified, is a part of the rate and must be used. However, the rules and regulations published in a tariff take precedence over any conflicting rules and regulations contained in either the classification or exception sheet unless otherwise specifically stated.

CLASSIFICATION OF SHIPMENTS FROM ONE TERRITORY TO ANOTHER.—Each of the three major classifications applies generally within its particular territory. On shipments moving from one territory to another there is **no general rule** with regard to which classification shall govern in the making of class rates. If a shipment going from a point in one classification territory to a point in another is subject to a single joint class rate, it must necessarily be subject to but one classification, but it may be either one or the other. The joint-class rates on rail traffic between the Atlantic and the Pacific seaboards are governed by the Western Classification; the joint-class rates on shipments between Official Territory and Southern are governed in some cases by the Official Classification and in some cases by the Southern. In case a shipment moves from one territory to another under a **combination rate,** the rate usually "breaks" at the territorial boundary, and the separate rate factors of the combination are governed by the classifications of their respective territories. Traffic moving from Ohio and Indiana to the southern states, for example, usually takes combination rates, which break at the Ohio River. North of the river the class rates applicable are governed by the Official Classification, and South of the river the factors of the combination are governed by the Southern Classification. The same situation prevails with regard to much of the traffic passing between points lying east and west of the Mississippi River, that boundary likewise being an important rate-breaking line.

RULES OF CLASSIFICATION IMPORTANT TO SHIPPERS.—The rules of classification contain a large amount of information with which all shippers by rail must be familiar. These rules include regulations for packing and marking shipments of freight; rules for mixed carload shipments (carload shipments of articles belonging to different classes); rules with respect to minimum charges for carload and less than carload shipments; rules concerning the use of fibre-board containers of all kinds; rules concerning exceedingly large or exceedingly bulky shipments; rules providing for certain deviations from ordinary carload minimum weights for light and bulky articles when loaded in cars longer than 36 feet, 6 inches, and many other regulations.

CLASSIFICATION ADJUSTMENTS.—An important function of a traffic department is to obtain classification adjustments. If in the opinion of the shipper the classification rating of any commodity handled by him is unjust or unreasonable, or if he has devised a new method of packing a commodity whereby the cubic measurement of the package is reduced and he is consequently of the opinion that the article is entitled to a lower rating than that assigned to the article in the classification based on the former method of packing, application for adjustment should be made to the proper classification committee. Forms of application for a change in rating, or for a new rating on a commodity not indexed by name in the Classification, may be obtained from the respective classification committees. The form should be filled out correctly and sent to the proper committee. An opportunity for a hearing is usually afforded the petitioner, when he can make oral argument in support of his application.

One of the best ways to prove unjust or unreasonable classification is by comparison. For instance, a certain article may be assigned a rating of first class, and another certain article of greater value, of less weight, of more bulk, and in the handling of which there is no less risk incurred, is assigned a rating of second class. Under these circumstances a good cause is apparently shown why the rating of the first article should not at least be made equal with that of the second article, if not lower. A frequent cause for application for change in classification ratings is the **knocking down of articles;** that is, taking the articles apart and packing them more compactly, thus reducing the cubic measurement of packages.

In order to illustrate the saving that would be effected by obtaining adjustments of this nature, above described, suppose in the first instance a shipper forwarded from New York City to Pacific Coast cities consignments the weight of which in one year aggregated 300 tons. The first and second class rates applying from New York City to Pacific Coast cities are $5.55 and $4.80 per 100 lbs., respectively. The change in rating from first class to second class would amount to a reduction of 75 cents per 100 lbs., or $15 per ton, a total of $4,500 for one year. Suppose in the second instance a classification adjustment was obtained changing a rating from second class to third class, and that the shipper forwarded from New York City to St. Paul and Minneapolis, Minn., consignments of the article on which the change in rating was obtained, which aggregated one thousand tons in one year. The second and third class rates applying from New York to these cities are $1.69½ and $1.29 per 100 lbs., respectively. This reduction amounts to 40½ cents per 100 lbs., or $8.10 per ton, a total saving of $8,100. This reduction would be effective for each 100 lbs. shipped thereafter so long as the rating remained in force.

The instances cited do not represent the total saving that would be effected by obtaining these adjustments. The first adjustment would be made in the Western Classification, and the second adjustment would be made in the

Official Classification. Therefore, in shipping to any point named in tariffs governed by these classifications, the changed ratings would apply. Hence it will be observed that the saving effected might aggregate a very large amount.

Shipping Instructions

FALSE DESCRIPTION OF SHIPMENTS.—In order to ship property intelligently it is essential that shippers should be thoroughly familiar with the **Rules of the Consolidated Classification,** particularly those rules which apply to the commodities they handle. The importance of this knowledge cannot be too strongly emphasized; for by having a correct understanding of these rules, many errors and consequent claims will be avoided. Also, by utilizing this knowledge and thereby complying with the rules and specifications, the lowest classification rating will always be obtained.

Should a shipper willfully describe a shipment falsely in order to secure a lower rating, he violates the Interstate Commerce Act, and for an attempt of this nature to defraud a carrier the **maximum penalty** upon conviction is a fine of $5,000 and 2 years' imprisonment. Property tendered for transportation is frequently improperly packed or described through carelessness or lack of knowledge of the classification specifications. This action does not constitute a violation of the Act. The intent to defraud must be willful. But shippers may incur a penalty by being assessed a higher rate than they would have been assessed if the property was correctly described. The carriers have **inspectors** at the various freight stations whose duties are to examine shipments to ascertain if they are correctly described, to correct the description if error is found, and to call shippers' attention to the matter. It is practically impossible for these inspectors to examine all shipments, and many consignments are rated in accordance with the description shown by shippers in the bill of lading, but without doubt numerous shipments are rated higher than they would have been if they had complied with the classification specifications.

PACKING.—Package and packing specification are based upon extensive tests as well as upon experience. The classification specifies the kind of containers in which articles should be packed, and if containers other than those specified are used, or if articles are shipped loose when the classification specifies they should be in barrels or boxes, the ratings on the articles are increased from one to three classes higher. **Articles taking different ratings** should not be placed in the same package. If they are, the rating of the higher class will apply to the entire contents thus incurring a severe penalty. The proper packing of goods for shipment is an obligation which the company owes not only to itself, but to its customers. Goods should be packed in such a manner as will protect them from the wear and tear of transportation. Proper packing is a form of insurance to which the consignee is entitled. It is the traffic department's duty to devise the very best form of packing suitable for the goods handled.

Among the things which must be taken into consideration in selecting containers are strength, weight of material and bulk. The lightest possible containers consistent with the specifications of the classification should be selected in order to keep down the freight and cartage charges, but containers must be of sufficient strength to afford proper protection to the property enclosed therein. The cause for a large number of damage claims is insufficient strength of the containers. Therefore, while reduction of weight in containers is desirable in order to reduce transportation charges, it is far more essential that all articles

should be packed for shipment in such a manner as to render transportation thereof reasonably safe and practicable.

Fibre containers are now used by many shippers instead of wooden boxes. They cost about 50% less than wooden boxes, and owing to their lightness freight charges are reduced. They thus effect a saving to both shipper and buyer. Thus, the traffic manager of a large, nationally known corporation decided to change from wood to fibre containers for several articles. The saving thereby in freight cost alone amounted to over $26,000 in one calendar year. In addition, a large saving was effected in the cost of containers.

MARKING.—Less than carload freight must be marked exactly as consigned in bill of lading. While transportation companies require their agents to compare the shipping receipts with the marks on packages and to call upon shippers for correction when a discrepancy between the two is found, this does not relieve the shippers of the responsibility of marking packages in accordance with the shipping receipts. If the carrier's agent signs a bill of lading which does not agree with the marks on packages and the shipment is sent to a point other than the correct destination, the extra expense incurred in getting the property to the correct destination has to be borne by the shipper.

The name of consignee, address, street and number, city or town, county (if there are two or more places of the same name in the state) must be plainly marked or stenciled on each package of less than carload freight. The name and address of shipper, preceded by the word "From," should also be marked or stenciled thereon. This is of great assistance to carriers in handling shipments that have gone astray, or are refused or unclaimed. Most mercantile houses, on receiving an order from a customer, give it a number known as the **"order number."** Therefore, in addition, the order number should be marked on packages, it being the only absolutely reliable means of identifying "astray" and "over" packages. It is also permissible to show such special marks as "Glass," "Keep Dry," "This Side Up," "Handle With Care," etc.

Railroad companies do not require marks on packages shipped in **carload lots,** but each package of a carload shipment which is transported by a boat line for part of its journey should bear distinguishing marks so that it may be identified in case of separation from the remainder of the shipment. These special marks should also be shown on bills of lading. When a less than carload shipment is **consigned "To Order,"** it must be so marked, and it must be further marked with an identifying symbol or number, which must be shown on the shipping order and on the bill of lading. The order number is a desirable identifying number to use.

MIXED CARLOADS.—The Consolidated Classification authorizes the shipment of mixed carloads of merchandise composed of different articles for which carload ratings or rates are provided when shipped at one time by one consignor to one consignee and destination. The rule governing mixed carloads is complex and quite difficult. However, any competent traffic man can readily interpret this rule and secure for his employer reduced transportation costs when occasions arise where this method of shipment could be employed. To illustrate how an understanding of the provisions of this rule may result in reduced transportation cost to a shipper who could ship mixed carloads, the following example is given. This case involves the application of one of the several provisions which provides that when different articles are shipped in a carload, they will be charged at the carload rate applicable to the highest classed article, and the carload minimum weight will be the highest provided for any of the articles in the carload.

A wholesale grocery house in New York City receives an order from a customer in Omaha, Nebr., for

500	boxes	canned tomatoes, total weight	28,000 lbs.
160	"	baking powder, in cans, total weight	8,000 "
80	"	ground spices, total weight	4,000 "
		Total weight of shipment	40,000 "

There are no through rates applying from New York to Omaha, so that rates must be constructed by combination, the lowest combination being the correct rate. The lowest through combination rates on the articles named break on the East Mississippi Crossings. The rates to the East Mississippi Crossings (East St. Louis, East Dubuque, Quincy, Rock Island, etc.) are governed by the Official Classification, and the rates beyond are governed by the Western Classification. Canned tomatoes, in boxes, are assigned carload ratings of 5th class in both classifications, minimum weight 36,000 lbs. Baking powder, in cans, in boxes, is assigned a less than carload rating of 3rd class in both classifications and carload ratings of 4th class in the Official and 5th class in the Western, minimum weight 30,000 lbs. Ground spices, in boxes, are assigned a less than carload rating of 2nd class, and a carload rating of 4th class, minimum weight 30,000 lbs., in both classifications. The highest carload minimum weight is 36,000 lbs., and the highest carload rating is 4th class. But as the total weight exceeds the highest minimum weight, freight charges would be assessed on the actual weight. Therefore, if shipper loaded these goods in one car and made out one bill of lading for the shipment, freight charges would be as follows:

40,000 lbs. at 115 cents per 100 lbs	$460.00

If the different commodities were forwarded as three shipments, that is, if a separate bill of lading were made out for each lot, freight charges would be as follows:

28,000 lbs. as 36,000 lbs. at 96⅓ cents per 100 lbs	$347.40
8,000 lbs. at 163 cents per 100 lbs	130.40
4,000 lbs. at 209 cents per 100 lbs	83.60
Total	$561.40
Transportation charges per correct forwarding	460.00
Saving effected	$101.40

LOADING AT PUBLIC OR PRIVATE SIDINGS.—If shippers load their cars either on a private siding or on a public team track when ordering cars, they should consult the **Railway Equipment Register,** a publication issued by the railroads of the United States, Canada and Mexico, through an authorized agent. It is published monthly and shows by car numbers, the marked weight, capacity, length, dimensions and cubical capacity of freight cars used to transport freight. It shows also the various kinds of cars used by the different railroads and gives the inside measurements, width of doors, both side and end, for all box cars.

ORDERING SPECIAL TYPES OF CARS.—Certain commodities require protection from heat or cold, and are forwarded in special cars built for that purpose. Other commodities, for the purpose of protection, are loaded in box cars rendered rain and snow proof, and under lock or seal. Some commodities are light and bulky and require large cars; some are loaded in bulk; some are loaded on open cars, because they are not affected by weather conditions, or

the danger of pilferage, or because they are too heavy or are of too great dimensions to be loaded in box cars.

When articles subject to **Rule 34** of the Consolidated Freight Classification are loaded in or on cars 36½ feet or less in length, they are subject to established carload minimum weights. These weights vary for different commodities. The minimum weight for articles subject to this rule is increased in proportion as car lengths exceed 36½ feet. The carrier is not always in a position to supply at short notice cars not over 36½ feet in length. Therefore, when cars are ordered not to exceed this dimension and for its own convenience the carrier supplies cars of greater length, the minimum weights for the cars ordered shall govern, except that when the loading capacity of the cars is used the minimum weight shall be that fixed for the cars ordered. If a car longer than ordered is furnished, a notation to that effect must be made on the bill of lading by carrier's agent.

TIME AND MANNER OF SHIPMENTS.—When deliveries are made to freight stations by truck, they should be made in sufficient time to enable freight agents to forward goods on the same day. Care should be exercised to avoid forwarding two or more shipments, covered by separate bills of lading, to one consignee on the same day. Whenever possible, consignments should be consolidated to conserve freight and cartage charges. Truckmen should be instructed not to accept receipts with the notation "Wet" or "Received in the Rain," covering property liable to become damaged by water, for if any damage by water is incurred in transportation, no claim will be allowed. The goods should be brought back to the store, and after having been placed in good condition, they may be shipped and clean receipts obtained. Shippers should not accept receipts bearing the notation "Shipper's Load and Count," except in cases of carload shipments which, on account of their nature, cannot be counted by the carrier's agents. If freight is loaded on a private siding and it is necessary to accept bills of lading with the notation "Shipper's Load and Count," especial care should be taken in the matter of **car seal records.** Shippers should be in a position to furnish affidavits as to contents of car in case of loss. In the absence of such records a claim for shortage may be uncollectible.

Under a strict interpretation of most switching and ferry car tariffs, carriers are not responsible for contents of cars loaded on private or assigned sidings until after they have been removed from sidings. Therefore, after cars are loaded and until cars are switched, they should be protected by a watchman even though goods have been receipted for. Prior to loading a carload shipment, the car should be thoroughly examined. Cars with leaky roofs and those which have been recently loaded with some offensive material, should not be accepted from railroad companies except under written protest.

WEIGHING OF CARS.—Carload freight is usually weighed at point of shipment but if scales are not available there, the weighing is performed on the nearest scales. The scales on which cars are weighed are frequently tested, and weighing is done in accordance with the rules of carriers. Carload freight is almost invariably re-weighed in transit, and also when the carrier believes that it is necessary to test the accuracy of previous weights. It may be re-weighed also by request of consignee or consignor when doubt exists as to the accuracy of the billed weight, subject to charges provided in tariffs. But no charge will be assessed by the carrier if the ascertained weight shows a discrepancy greater than the tolerance. When carload freight is re-weighed and there is found to be a difference in weights, an allowance of 1% of the lading, with a minimum of 500 lbs., is made, due to variation in scales or weighing,

known as **"Tolerance."** If the difference in weight does not exceed the tolerance, the billed weight is not corrected. For some commodities like ashes, clay brick, ore, and similar bulk freight, the tolerance is 1% of the lading with a minimum of 1,000 lbs.

AGREED WEIGHT.—When shipments are forwarded in **packages of uniform size and weight,** arrangements may be made with carriers to ascertain the weight of such packages and the weight thus determined will be subsequently accepted and applied by the carriers under **weight agreements.** Such weights however, must be designated on bills of lading or weight certificates and the property will not be re-weighed. Under an arrangement of this nature freight is received by carriers and billed at what is termed the "agreed weight." A copy of each weight agreement must be filed with the Interstate Commerce Commission. The carriers, however, frequently check the records of shippers for the purpose of verifying the weights and descriptions furnished, and if the freight is forwarded in carloads, a sufficient number of cars will be weighed for verification.

An agreement of this kind is a great aid to shippers who forward their freight in containers of uniform size, as it facilitates the movement of freight and renders it unnecessary for the carriers to weigh such shipments. Under this agreement the shipper must report and certify correct gross weights and give correct description of commodities in bills of lading. He must also allow the authorized representative of the carrier to inspect the original weight sheets and records necessary to verify the weights and descriptions of the commodities certified in the bills of lading. Either party to a weight agreement may cancel it on 10 days' notice in writing.

PACKAGE CARS.—The "package car" service in vogue with many railroads is a desirable method of forwarding **small shipments to distant points.** It is a service afforded by railroad companies whereby on a certain day or days of a week they load at designated stations, cars with less than carload shipments destined to certain distant points; for example from New York to St. Louis. The western railroads provide "package car" service also from many of the western gateways to Denver, and other western cities, and sometimes "package car" service is given from New York to Denver. The **advantage gained by this service** is that freight goes through to destination without transfer; time of movement is thus greatly reduced; liability for loss and damage is reduced to a minimum; and the transportation charge is no greater than the regular, lawful, less than carload rate. Frequently the carriers furnish a **refrigerator package car service** which many shippers use advantageously.

FORWARDING COMPANIES.—Valuable facilities are offered by forwarding companies, which consolidate carloads of analogous commodities, or articles taking the same carload class rates, and forward them to distant points, consigned to their representatives or themselves, at which points the goods are distributed to the respective consignees. The rates charged are lower than the regular less than carload rates, and the forwarding company takes for its service the difference between the rate charged shipper or consignee and the carload rate. Large shippers, having branch houses in various parts of the country, frequently use the **consolidated car method of shipment** and forward carloads of various less than carload consignments to a distant destination for distribution at that point, or for forwarding from that point to their final destinations, thereby effecting a large reduction in the transportation charges, the saving being the entire difference between the less than carload and carload rates.

DELIVERY OF FREIGHT.—Carload freight is delivered to consignees at freight stations, on public team tracks, private tracks or assigned sidings or by lighters. If **station delivery** is made, consignees are allowed 48 hours (not including day of arrival, Sundays and holidays) to remove property. After that period has elapsed storage charges are assessed. If **track delivery** is made, consignees are allowed 48 hours after the first 7 A. M. after placement (not including Sundays and holidays) to unload cars. After that period has elapsed demurrage is charged. If **delivery is made by lighter,** consignees are allowed 48 hours after lighter reports at its destination (not including Sundays and holidays) to unload lighter. After that period has elapsed demurrage is charged. **Less than carload freight** is usually delivered at a freight station from platform or pier, and consignees are allowed 48 hours (not including day of arrival, Sundays and holidays) to remove goods. After that period has elapsed storage charges are assessed.

PRECAUTIONS IN SIGNING RECEIPTS FOR FREIGHT.—Great care should be exercised in signing receipts for freight, because unless exception is taken as to the condition of freight and the exception noted on receipts, shipments are receipted for in "good order." **A "good order" receipt** does not entirely release carriers from liability, but it is difficult to collect claims when a "good order" receipt has been signed. Every consignment should be carefully counted and examined. It frequently occurs, through carelessness, that clean receipts are given for freight that is not received or is in a damaged condition. If packages show evidence of having been tampered with, they should be opened and only actual contents signed for. If packages appear to be light in weight, because of either leakage or sifting, carriers should be requested to weigh them, and only the actual weight signed for. Before beginning to take delivery of cars covered by bills of lading bearing the notation "Shipper's Load and Count," car seals should be examined to ascertain if they are intact. If they show evidence of having been tampered with, the contents of cars should be carefully tallied and examined.

THE CREDIT LIST.—Shippers or consignees may arrange to be placed on the credit list of carriers by application and compliance with their individual rules. In accordance with the provisions of the Interstate Commerce Act, credit cannot be extended for a longer period than 96 hours. This accommodation is a great convenience to shippers and quite an economical factor, for it aids greatly in prompt shipment of goods on which freight charges are to be prepaid. It is also a convenience to both consignees and carriers.

AUDITING FREIGHT BILLS.—The auditing of **freight bills for incoming goods** is a very important duty of the traffic department. While a competent traffic department is an assurance that outgoing shipments are correctly classified, routed and rated, yet incoming goods are forwarded by different shippers, many of whom do not have skilled traffic men handling their shipping. Hence, incoming freight is often misrouted, incorrectly classified, and, therefore, excessive rates are charged. Records show that over $5,000,000,000 are paid annually into the treasuries of the various railroad companies by shippers and receivers of freight, and comparatively little attention is paid to checking and verifying the correctness of the freight bills aggregating this vast amount. In every well organized business disbursements are audited by competent accountants, few of whom, however, possess the knowledge necessary to audit freight bills correctly.

To audit properly bills for transportation charges requires an extensive knowledge of classification, rate construction, routes, switching, lighterage,

the rules governing weights and weighing, demurrage and storage. Skillful traffic men have obtained refunds aggregating a very large amount through claims for overcharge caused by incorrect routing and other errors. In auditing freight bills honesty of purpose should be demonstrated, and if undercharges are discovered, payment should be made to the interested carrier. If this method is employed, a traffic department will experience no difficulty in collecting just claims and cordial relations will be maintained with the carriers.

Drayage

MORE ECONOMICAL FREIGHT HANDLING.—The motor truck is an economical factor in transportation, but motor trucking is not organized on a systematic basis. Stability of service and rates and regulation thereof by the Interstate Commerce Commission would add greatly to the value of this agency of transportation. Under the usual method of handling less than carload shipments by rail, at least six handlings are necessary:

1. Loaded on the shipper's truck and hauled to the freight station.
2. Unloaded at the railroad station platform.
3. Loaded into a freight car.
4. Unloaded at railroad station at destination.
5. Loaded on the consignee's truck.
6. Unloaded at the store door or warehouse of consignee.

If shipments are transferred en route, two or more handlings are required. If the shipments are transported entirely by motor trucks, only two handlings are required; viz., loaded on the truck at shipper's store and unloaded from truck at the store door or warehouse of consignee. When consideration is given to the fact that labor is becoming an increasing factor in transportation costs, the possible economies by handling short-haul shipments by motor truck are readily observed.

Long Distance Trucking.—Highways and volume of freight permitting, it is usually practicable to truck within a radius of 50 miles, and under certain conditions for longer distances. Aside from expediting the movement of freight between points of origin and delivery by the use of motor trucks the following elements are to be considered in comparing the cost of motor truck transportation with that by rail.

Packing.—If goods are moved between point of origin and consignee in the same vehicle, a considerable saving may be accomplished in packing and cost of containers over the need for packing to withstand the necessary rehandlings when goods are forwarded by rail.

Trucking to and from Freight Stations.—Lacking a railroad siding, goods would have to be trucked to railroad station at point of shipment and on arrival at destination goods would again have to be trucked to consignee's store.

Freight Charges.—When shipping by rail or water it is required that many articles be packed in boxes or crates, and freight charges on the articles are increased by the weight of these containers. But when shipping direct by motor trucks, it is frequently possible to eliminate cases or crates in the packing of goods and thereby the transportation charges are reduced, in addition to the saving of cost of containers. To the above may be added the consideration of deterioration of goods through successive handlings, the liability of damage, pilferage or loss, if goods are shipped by rail or water.

STORE DOOR DELIVERY.—Store door delivery is simply the continuation the rail or water transportation of freight to the address of consignees by ucks. A complete system of store door delivery would provide for the conuous movement of freight by one agency from the address of shippers to e address of consignees.

The present method of handling freight is wasteful from every point of view, nd is continued only because of the lack of coordination between shippers, arriers and truck operators. The expense of sending trucks of many congnees to freight terminals is costly and the need for sorting freight at terminals permit consignees to select their goods increases terminal charges. Consignees ay higher trucking charges due to partly loaded trucks, delays at terminals, igh loading charges and street congestion. The spread of waste is reflected a higher cost for transporting freight than is justified.

Routing of Freight

SHIPPER'S RIGHT TO ROUTE FREIGHT.—Shippers have the legal ight to route their freight, except in cases of emergency occasioned by conestion of traffic, when the Interstate Commerce Commission has the power o control the movement of traffic and divert it from one route to another. nder ordinary circumstances, however, the **shippers' right is absolute,** and arriers are obliged to follow the shippers' routing instructions.

According to transportation law the **lawful rate** on any shipment is the ariff rate via the route over which the shipment moves.

UNROUTED SHIPMENTS.—Shippers may direct routing of shipments nd their instructions must be observed by carriers, but in the absence of pecific through routing, it is the duty of carriers to route shipments via **the heapest reasonable routes,** of the class designated by shippers; that is, all-rail r rail-and-water, and via which they have rates that they can lawfully use; iz., rates contained in tariffs on file with the Interstate Commerce Commission. However, if shippers do not know the cheapest route, the shipments may be orwarded via more expensive routes and the overcharges thus incurred become osses because, owing to the shippers' lack of knowledge, the errors are not liscovered and therefore no claims made.

MISROUTING.—If only all-rail routes are available and carriers forward n unrouted shipment via any routes but the cheapest, they are guilty of "misrouting." The liability for errors in routing by the carriers is shown by he following instance: The general freight agent of one of the large trunk ines recently stated that his office was "behind twenty thousand rate quoations." When it is considered that many of these requests were for rates which had to be constructed by combination, and that such combination rates ould break on a number of different base points, it would not be surprising hat the rate clerks in their haste to furnish the desired information should nake errors. For example, rates from trunk line territory to points in the state f Texas are constructed by combination. There are at least six different base oints on which rates may break, and owing to the different classification atings of various articles, it is possible for the lowest combination rate to break n any one of these six base points. When it is considered that thousands of nrouted shipments are handled by carriers, it is reasonable to assume that nany errors are made. Hence the necessity for a traffic department, versed n transportation law, routing and in the application of tariffs for correct routing

of outbound shipments and checking of inbound routing of freight received whereby a large amount in transportation expenses may be saved.

REFUND OF CHARGES ON MISROUTED FREIGHT.—The charges applicable via the route of movement are collected, but the payer of the freight, shipper or consignee, as the case may be, is entitled to a refund of the difference between the amount paid and the charge applicable via the cheapest route. The refund must be paid by the carrier or carriers that were guilty of the misrouting. Carriers participating in the haul which were not parties to the giving of improper routing instructions, receive their full legal revenues.

ADVANTAGES OF GIVING OR NOT GIVING ROUTING INSTRUCTIONS.—A shipper may insure his right to the lowest legal rate on a shipment, therefore, by giving no routing instructions at all to the carrier. Many shippers, however, prefer to route their freight. If two or more routes are available for a shipment, even though the rates are the same, it may be advisable for a shipper to indicate the routing, in order that delivery may be made at destination by the carrier having freight-house, team, track, or other delivery facilities most convenient for the consignee. Shippers route their freight often because of a desire, either upon their own part or upon the part of their customers, to give business to particular carriers. Where rates are different via different routes, a shipper may direct his freight to be sent via the more expensive route because of a possible saving of time, or because of the existence of certain reconsignment or transit privileges which the cheaper route does not afford.

CONFLICTS BETWEEN ROUTES AND RATES.—Ordinarily a shipper who specifies in a bill of lading the routing for a shipment will also insert the rate applicable via that route. It sometimes occurs that a shipper specifies a certain route and inserts a rate not applicable by the specified route, but applicable via some other. In such a case it is the duty of the carrier to call the shipper's attention to the conflict of rate and route before the shipment moves, and obtain proper routing instructions. Should the carrier not endeavor to inform the shipper of his error, and should it forward the shipment via the route given, it would be guilty of misrouting, and if the charges collected were higher then those which would have been collected on another route, the payer of the freight could secure a refund.

DETERMINATION OF ROUTE.—The first thing to determine in making a shipment by freight is the name of the railroad station or boat landing at which the consignee will receive the goods, and this determination must be based on fact and not on conjecture. This information may be obtained from the current issue of a standard **Shipper's Guide,** which should be consulted when shipping to an unfamiliar point, unless complete routing directions are given on the purchaser's order for the goods. The **destination and terminal delivery** should be stated so definitely that there will be no question as to its location. When the terminal delivery desired is shown in the bill of lading and delivery is offered at a terminal other than that designated, the consignee can demand that delivery be made at the terminal shown in the bill of lading; or if he elects to accept shipment at the terminal where delivery is erroneously offered, he is entitled to recover the difference in the expense of drayage incurred and the expense which would have been incurred if proper delivery had been effected by carrier.

ROUTING SHEET.—In order to facilitate the handling of shipments, a routing sheet should be compiled for the guidance of the shipping department. If the volume of traffic and the territory in which it is distributed should so warrant, a separate routing sheet should be compiled for each state to which

goods are shipped, showing the points to which shipments are made and the names of all the railroads operating in the state. When shipment is made to a point not specified, refer to a standard guide and ascertain the name of the railroad on which the town is located and use route designated in the routing sheet for points on that railroad. A **key designating the various routes** by numbers, letters and numbered letters, should be prepared. One key properly made serves for all the routing sheets. For example, take the state of Kansas, with New York City as the shipping point, and assume shipper's store is located near the freight station of the Lehigh Valley Railroad. Routing sheet and key should be prepared in the following manner:

Route Order to Kansas		Routing Key	
FROM NEW YORK TO	ROUTE SYMBOL	ROUTE SYMBOL	FREIGHT ROUTING
Atchison	S	S	L. V. °/o N. Y. C. & St. L. °/o A. T. & S. F. at Chicago
* * * *	*	*	* * * * * * * * * * * * * * *

The route symbol for all points on the A. T. & S. F. Ry. would also be the letter "S", and other points and railroads would be designated in a similar manner.

CUSTOM VERSUS KNOWLEDGE.—Many shippers patronize a particular line simply because of custom, or because it is well known and liked. They do not know that by forwarding some of their shipments via other lines they might save cartage expense to their customers, and that occasionally differential lines may be used advantageously. Inbound shipments are frequently received at terminals quite distant from the consignees' places of business, and as a matter of custom they send for the freight without complaint, not realizing that if their purchasing department was enabled to furnish proper directions for terminal routing, a large unnecessary expense would be saved. In order to avoid extra expense, delays and claims, shippers should endeavor to get purchasers to specify in their orders the terminal delivery desired, and consignees should endeavor to have shippers write the terminal routing in the bill of lading.

Demurrage and Shipping Services and Privileges

DEMURRAGE.—Demurrage is a charge made by carriers in accordance with a **special service tariff** for delay in loading or unloading cars or lighters. Forty-eight hours after cars are placed, or after lighters report at destination, are allowed for loading or unloading. The demurrage charge on cars held beyond the free time is $2 per day, or fraction of a day (Sundays and holidays not included) for the first 4 days. After that period the charge is $5 per day or fraction of a day. The demurrage charge on ordinary lighters held beyond the free time is $20 per day, or fraction of a day, Sundays and holidays included. On lighters handling heavy commodities, the charge is considerably higher. Demurrage rules and charges in force on American railroads are **virtually uniform** throughout the country. The rules which are in general use are contained in an agency tariff known as the **"National Code of Demurrage Rules and Charges."** This tariff shows what cars are subject to demurrage and the conditions under which the penalty becomes operative.

BUNCHING.—When by reason of delay of carriers in filling orders, cars are placed for loading in numbers in excess of daily car orders, the shippers are allowed such free time for loading as they would be entitled to had the cars been placed as ordered. When, due to the fault of carriers, cars are accumulated

and delivered by railroads in numbers in excess of daily shipments, the consignees are allowed such free time for unloading as they would have been entitled to had the cars been delivered in accordance with the daily rate of shipment. An illustration of the latter is as follows: A shipper at point A forwards to a consignee at point B 5 cars per day, and after placement the consignee can usually unload 5 cars per day. Owing to delay en route the railroad does not place any cars for a period of 4 days, but on the 5th day 25 cars are accumulated to be placed. No demurrage charge could be assessed against the consignee if he unloads his daily allotment of 5 cars within the free time, because the accumulation of the 25 cars would be what is termed "bunching."

AVERAGE AGREEMENT.—Shippers and receivers frequently make agreements with the carriers whereby the charge for detention of cars for loading or unloading shall be computed on the basis of the **average time of detention during each calendar month. One credit** is allowed for each car released within the first 24 hours of free time. After 48 hours' free time, **one debit** of $2 per car per day, or fraction of a day, will be charged for the first 4 days, Sundays and holidays not included. When a car has accrued **four debits,** a charge of $5 per day, or fraction of a day, will be made for all subsequent detention including Sundays and holidays. Credits earned on cars held for loading cannot be used as an offset for debits accruing on cars held for unloading, or vice versa.

Such agreements are often quite advantageous to receivers of frequent carload shipments, especially when deliveries are made on private sidings. However, before entering into agreements of this nature, the service rendered by railroads and the season of the year should be carefully considered, because demurrage charges will not be cancelled or refunded on account of weather interference, nor because of bunching of cars. On written notice either party may **terminate such agreements,** which notice becomes effective on the first day of the month succeeding that in which it is given.

STORAGE.—Storage is the charge assessed by carriers in accordance with the **tariff governing storage rules and charges,** and applies to freight, either carload or less than carload, unloaded at terminals and held after the expiration of the free time limit. Ordinary merchandise held at terminals in excess of free time allowed will be subject to the following **charges per day,** or fraction of a day, or at the option of the carrier may be sent to public warehouses:

For each of the first 5 days, 1½ cents per 100 lbs.; for the 6th and each succeeding day, 3 cents per 100 lbs.; minimum storage charge per shipment on freight held beyond free time, 5 days or part thereof, 25 cents; 6 days or more 50 cents.

Carriers do not usually hold freight at terminals after the free time has expired but place goods in public warehouse at expense and risk of owner. However, as storage charges are assessed for each day, or fraction of a day, one day's terminal storage is always added to the warehouse storage charge.

LIGHTERAGE.—In the large ports of the United States, such as New York, Boston, etc., freight is delivered to vessels or other points by boats called lighters, floats, and barges. Within certain limits all commodities (other than prohibited articles which are specified in the governing tariff) in carloads are entitled to **lighterage free delivery.** This term "lighterage free," means that the rates to or from the harbor city include transportation by lighters, barges, or car floats, to or from any dock or vessel within the free lighterage limits. Any **wharfage charge** or charge for berthing of lighters must be paid by shippers or consignees,

who must also provide **berthing.** When lighters are given a berth at public bulkheads or piers, no wharfage charge is assessed.

SWITCHING.—Switching is the service performed in moving cars from one track to another in what is termed **"switching limits,"** which is the area of a terminal within which switching service is performed under switching rules and regulations. **Switching charges** are assessed on the basis of a certain rate per car, as specified in a tariff, and are added to the freight charges, unless the rate includes the switching service. The act of carriers in including in their rate, from starting point to point of delivery at destination, charges that may have been assessed against the freight for switching service during its transportation, is termed **"absorption of switching charges."** Railroads operating between competitive points are always competing for desirable traffic, and in order to obtain this traffic they must offer equal rates and service. A line desiring to handle the traffic of an industry located on the tracks of a competitor, at a competitive point, must pay the competing line's switching charge in order to equalize the rates so as to obtain at least a portion of the traffic.

At terminals served by two or more railroads, cars are often loaded at private sidings on the tracks of one railroad and switched to another carrier to be forwarded to destination. At destination the industry to which freight is consigned may be located on a private siding connected with the track of a competitor to the one performing the transportation service, and in order to accomplish delivery it would be necessary to have the car containing the freight switched to the competing line. In both of the cases mentioned the railroad having the line haul generally absorbs the switching charge in its transportation rate, but the rule authorizing these absorptions must be contained in a legally published tariff.

DIVERSION AND RECONSIGNMENT.—The privilege of diversion and reconsignment afforded by carriers is essential to many shippers, particularly those who ship **perishable freight,** such as fruit and vegetables. These commodities are loaded into cars on the Pacific Coast, in the South, or from steamers at the Atlantic seaports, and started for some city where there is supposed to be a good market before sales have been made. Prior to cars reaching their destination it may develop that some other city would offer a better market, or the articles may be sold to purchasers located elsewhere. The shippers then resort to the privilege of diversion and the cars are sent as they direct.

How Requests for Diversion Are Made.—A request for diversion or reconsignment should be filed with the agent at the point from which the shipment was forwarded, or with a traffic executive of the transportation line having the shipment in its possession. If the shipment has reached its destination, the request should be filed with the agent there. The request should contain complete information and specific instructions as to the action desired.

Prompt Action Necessary.—The shipper should be thoroughly familiar with the carriers' tariffs containing **regulations governing diversion and reconsignment.** In order that the service may be performed by carriers without unnecessary expense to the shipper, prompt action on his part is essential, especially in cases of change of destination to one nearer the point from which the shipment was forwarded, so as to avoid a back haul. If an order has been cancelled after shipment, or for some reason the shipper desires to stop shipment, the agent at point of origin should be requested to stop the car at the nearest **hold point.** After notice is received by the shipper that the car has been stopped at a certain point, he has twenty-four hours to furnish instructions for dis-

position without extra expense other than the **diversion charge.** Transportation charges may often be considerably reduced by prompt action through the proper channels.

Freight Rate Applicable in Diversion.—Diversion rules and charges usually apply where shipments are handled at local rates, joint rates, or combination of intermediate rates. The through rate from the point of origin via the diversion point to final destination, in effect on date of shipment, is the rate that must be applied. If the rate from original point of shipment to final destination is not applicable through the point at which the car is diverted, the tariff rates in effect to and from the diversion point will apply, plus diversion charges. The application of the through rate is one of the important privileges conferred on shippers because otherwise the rate to the diversion point and the rate from that point to final destination would be applied, which would make a much higher charge.

RECONSIGNMENT RULES AND CHARGES.—The charges for reconsignment and the rules governing reconsignment privileges are published in tariffs issued either by individual lines or by agents acting for a number of lines. The charges vary according to the conditions under which reconsignment is made. For a **single diversion,** if the order is received at the initial billing point before the departure of the car from the freight-yard, or for a **change in the name of the consignor or consignee** which requires no additional movement of car, some railroads make no charge at all. In general, if the request for reconsignment is received before the arrival of a car at the original billed destination, the charge is less than if the request is received after the car reaches the reconsignment point.

TRANSIT PRIVILEGES.—Another important privilege which many American railroads accord to shippers is the "transit" privilege. Goods may be shipped to designated "transit" points, unloaded and perhaps passed through a manufacturing or other process, and then **re-shipped to a final destination,** at a charge considerably less than the combination of rates on the transit point. The rate may be the through rate from original point of shipment to final destination, plus a small charge for transit, or it may be made up of a combination of rates somewhat lower than the ordinary rates to and from the transit point. Grain may be moved to a milling center, made into flour and other grain products, and the manufactured articles shipped to final destination, at a through rate from the initial point of the grain shipment—either the grain rate or the grain products rate—plus a small charge for the stop-off privilege. Transit privileges permit the manufacture of logs into lumber, the compression of cotton, the fabrication of iron and steel, the feeding of live stock, the refining of oils, or merely storage, at intermediate points. **Transit tariffs** show the charges for the transit privilege, and the rules under which the privilege can be exercised. The privilege, when given, permits the shipper to effect a saving in transportation charges, and it quite frequently tends to neutralize any disadvantage which otherwise a producer of raw materials, located far from a milling or manufacturing center, might have.

Tariff Interpretation

SELECTING TARIFFS.—The first important duty of a shipper, when handling tonnage to or from territory tributary to water and rail routes, is to become familiar with the **differences in service and the rates** by the several agencies of transportation, in order to select intelligently the service best

suited to his particular traffic. It is necessary, first, to determine, either through knowledge or a standard guide, the route or routes available (that is, the initial line or lines, junctions, and delivering line or lines), then to locate the tariff or tariffs applicable between the points of movement.

Every shipper should establish and maintain **a tariff file,** and place therein only the tariffs necessary to determine the rates on the commodities he handles, a standard Shipper's Guide, and the Consolidated Classification. By doing this he will be able to determine rates promptly and accurately as occasion demands, both for the purpose of applying correct rates on outbound shipments and of verifying the rates assessed on inbound goods. Shippers will experience no difficulty in obtaining the requisite individual railroad tariffs, as carriers will furnish them upon application and will place the name of the applicant on its mailing-list, when so requested, for supplements and re-issues, without charge. The **large agency tariffs** may have to be purchased, although many shippers, on request of a railroad traffic official, are placed on the mailing-lists of the different **rate bureaus,** and the tariffs and supplements as issued are mailed to them without charge. If purchased, they may be obtained from the agents of the respective tariff bureaus, who will place the purchaser's name on file and supply him with all supplements and re-issues, if requested to do so.

DETERMINATION OF RATES APPLICABLE.—Upon application to carriers, quotations of rates may be obtained for shipments to be forwarded via their lines. When a request is made by a shipper in writing for a rate, the carrier must furnish the rate applicable in writing. If the carrier should quote an incorrect rate, or should refuse to give a written quotation, and the shipper should suffer damage in consequence thereof, the only remedy is a complaint to the Interstate Commerce Commission and the carrier would be liable to a penalty of $250, which would accrue to the United States, but the shipper receives no reparation for the damages suffered. It can be readily understood why this is the law, for if the rate quoted by carrier is lower than the lawful rate and the carrier is compelled to protect its quotation, the shipper would be practically receiving a rebate and it would tend to discriminate against some other shipper who had paid the lawful rate.

SERIOUS LOSS CAUSED BY INCORRECT RATE QUOTATIONS.—A shipper may suffer serious loss through incorrect quotation of rates by carriers. If a higher rate than the lawful rate is quoted, **contracts may be lost** by computing in the bid incorrect transportation cost. An illustration of serious loss incurred through the incorrect quotation of a lower rate than the lawful rate is shown in the following instance:

A shipper requested in writing the rate on a named commodity from a certain city in the United States to a point in Canada. The carrier furnished the rate in writing as 6th class. Because of the low transportation rate quoted the shipper was able to name a price which won the contract. The shipment consisted of quite a number of cars of heavy tonnage. Subsequently a difference bill was presented by the carrier for undercharges amounting to a large sum, considerably more than the profit, which the shipper was compelled to pay under bitter protest. The error made by carrier's rate clerk was of the kind liable to be made by any busy rate clerk. An exception to the classification applicable to this commodity was shown in the tariff naming sixth class rate, the classification rating being fifth class, but the clerk did not read the exception through carefully: The last line read "Does not apply on shipments to Canada."

DETERMINING RATE.—When the route is selected via which it is the intention to have shipment move, the tariff or tariffs containing rates applying

over that route should be consulted. On the title page of each tariff there is shown the name of the classification, and usually the exceptions to classification, governing the rates published therein. Frequently the exceptions are contained in the tariff itself, but sometimes they are so numerous that a separate publication is issued, and the tariff then gives the I. C. C. numbers of the tariffs containing the exceptions. If the exceptions of the initial carrier are contained in a separate publication, that tariff must be consulted for the purpose of ascertaining if there is an exception to the classification covering the commodity to be shipped.

In order to determine expeditiously the rate applicable to any commodity, the **order of procedure** is as follows:

Consult the table of contents and then find the pages on which are shown the points **from and to which rates apply,** in order to ascertain the rate bases. If the class rates and commodity rates are contained in separate publications, the **commodity tariff** should be consulted; or if the tariff or tariffs applicable contain both class and commodity rates, consult the **index of commodities,** in order to ascertain if there is a specific commodity rate applicable to the article. If there is, it is the rate that should be used, unless the alternative application of class or commodity rates is authorized; then be sure to use the lower rate. Read carefully the **rules of the tariff** in order to ascertain if there is any provision affecting the application of the rate. Ascertain if there are any exceptions to the classification affecting the rate. In reading a tariff it must be borne in mind that each **reference mark, symbol or character** means something. Whenever a character appears opposite a name, a rate, or any other item, ascertain what that character means. For instance, the figure 1 in a circle opposite the name of a station may indicate a reference which would state that the rates named do not apply via certain routes. A number in a circle in the rate basis column might indicate that certain arbitraries must be added to the rates applying from a named base point. Wherever a **note** is referred to, it should be carefully read, because the rate is only applicable in accordance with the provisions of that note. If no specific commodity rate or exception to the classification is applicable, ascertain the ratings assigned the article in the classification, both C. L. and L. C. L.; also the minimum weight required to constitute a carload. Then the **table of class rates published in the tariff** should be consulted to ascertain the rate as per the rating given in the classification.

COMBINATION RATES.—Combination rates are made by adding two or more rates together. They are lawful only when the different factors are on file with the Interstate Commerce Commission and when there is no through rate in effect between the point of shipment and destination. In constructing a combination rate it is necessary to consult two or more tariffs. These tariffs are usually governed by different classifications; and frequently a class rate will be applicable in one tariff and a specific commodity rate in another. When a commodity rate is applicable to a shipment, the minimum carload weight necessary for the application of that rate is often different from that shown in the classification, or the tariff applicable to one of the factors may contain an exception to the classification. As the **lowest lawful combination rate** is the correct rate applicable, it is necessary to ascertain the rates from the point of shipment to the various **gateways or base points,** and the rates beyond via the connecting lines; then add them together so as to determine which combination makes the lowest rate.

Rate Adjustments and Freight Claims

HOW RATE ADJUSTMENTS ARE OBTAINED.—Broadly speaking, the rate-making machinery is the **freight traffic department** of the individual carrier which functions either alone or jointly with "rate bureaus" or "rate committees," representing the carriers interested or affected. The "regulator" of the machinery provided by our laws is the Interstate Commerce Commission, or the state commissions, who are empowered to see that all transportation rates are proper and reasonable for both the carrier and the shipper. The **jurisdiction of the Interstate Commerce Commission** is over all freight, passenger and express traffic between or through two or more states, and to and from foreign countries, but only in so far as such transportation takes place within the United States. The **jurisdiction of a state commission** is restricted to freight, passenger and express traffic having origin, destination and entire transportation within the boundaries of the state. The **duties of rate bureaus or rate committees** are to consider all applications affecting rates and practices presented by shippers or receivers, and to recommend the disposition to be made of these applications.

When applying for adjustments of rates or practices considered to be unfair or unreasonable, in order to expedite the disposition of applications the correct form of procedure for the shipper or receiver of the commodity affected would be to make application to the proper rate bureau or rate committee. Applicants should be sure the conditions justify the adjustment asked for and should show complete information as to:

1. Commodity involved.
2. Present classification.
3. From what point or points.
4. To what point or points.
5. Present rate, rule, or minimum weight.
6. Proposed change desired.
7. Argument in support of application.

Oral hearings will be afforded if desired, but it is preferable to present the matter by written argument where that can be done satisfactorily. After receipt of argument, oral or written, the rate bureau or rate committee conducts an investigation and makes recommendation to the carriers interested, which recommendation is usually acted upon within 15 days from the date of submission. When a change is agreed to, the agent publishing the tariff provides therefor either by supplement to or reissue of the tariff, subject to the approval of the Interstate Commerce Commission.

Some of the reasons for seeking rate adjustments are as follows. It sometimes happens that the rate from a certain point to another point is higher than the rate to a more distant point over the same route. In such cases it is usually proper for shipper or receiver to present an application for a lower rate, or a rate no higher than the rate to the next point beyond. When the rates to a certain city are higher than the rates to a nearby city located on the same system, it is often contended that the higher rates are discriminatory and prejudicial to the interests of that city, and application is made to have the rates equalized. When a shipper forwards or contemplates forwarding a large tonnage of a certain commodity, he usually makes application to have a specific commodity rate established applicable to this commodity; that is, a special rate lower than the class rate, applying only to the commodity specifically named. When a specific commodity rate (lower than the class rate) is estab-

lished, applicable to a certain article, shippers of analogous articles usually make applications to the rate bureau or rate committee having jurisdiction over the territory from which shipments are made, for the establishment of a similar rate applicable to their articles. When shippers desire to place their goods in certain **markets in competition with other shippers** located in different sections of the country, applications are made for rate adjustments which will enable them to accomplish their purpose.

WHEN APPLICATION IS DENIED.—When application for adjustment of a rate or a classification rating is made to a rate committee or classification committee which is denied and the applicant believes that his request is just and reasonable, the proper procedure is to file a **formal complaint with the Interstate Commerce Commission,** which results in the Commission holding a hearing, giving the complainant an opportunity to present his side of the case. After hearing the other side, the Commission determines whether or not the complaint is justified. If the decision is in favor of the claimant, the Commission prescribes what in their opinion is a just and reasonable rate or classification rating.

REQUEST FOR SUSPENSION OF NEW RATE.—Whenever a new rate or a new classification rating is published, which in the judgment of a shipper or group of shippers is unreasonable or prejudicial to his or their interests, a request should be filed with the Commission, asking for a suspension of such rate or classification rating. In such cases it is usual for the Commission to set a date for a hearing, and pending such hearing the use of the new rate or new classification rating may be suspended, but not for a longer period than 190 days. If the hearing is not completed at the end of this period, the new rate or the new classification rating goes into effect, but the Commission may require the carriers to keep accurate account in detail of all amounts received by reason of the increase, specifying by whom and in whose behalf such amounts are paid, and upon completion of the hearing and decision, may order the interested carriers to refund, with interest, to the persons in whose behalf such amounts were paid, such portion of such increased rates as by its decision shall be found not justified. A complaint of this nature should be filed with the Commission at least 10 days before the effective date of the schedule and the complaint should show the I. C. C. number of the schedule, specifically referring to the parts thereof as to which suspension is asked, together with reasonably detailed explanation as to the probable effect of the proposed new rate or new classification rating.

FREIGHT CLAIMS.—A common carrier by land is an **insurer of the freight** which it carries. Under both the common law and statutory law, when a railroad accepts property for transportation, it contracts to deliver it in the condition in which received, and in the event of loss or damage, to the property, it is liable to the owner, except the loss or damage be due to an act of God, the public enemy, authority of law, act or default of the shipper or owner, inherent vice or defect of the property, or natural shrinkage, such as is common to grain and other articles of freight. It is inevitable that in the transportation of the enormous tonnage of freight which American railroads receive, some freight should be lost or damaged. While the amount of loss is not large in proportion to the total value of the goods carried, it is nevertheless large enough to cost the railroads several million dollars each year.

CONTRACTS LIMITING LIABILITY FOR FREIGHT CLAIMS.—Formerly it was possible for carriers to enter into contracts for the limitation of the amount of their liability for loss or damage to freight. The Interstate Com-

merce Act now provides that such contracts are illegal and void, except in cases where the Interstate Commerce Commission expressly permits carriers to establish rates based upon the declared value of articles transported. When such rates are permitted, the declared value of the freight subject to such rates is the **maximum amount** which the owner may recover if the freight is lost or damaged. The Commission may not, however, permit rates based upon declared value to be made for the transportation of **ordinary live stock.** For this particular variety of freight the liability of the railroad is full and complete. There are not many articles of freight upon which rates based upon declared value have been permitted. The measure of the liability of a railroad for lost or damaged freight is the "full actual loss," which is the market value of the goods, in the quantity shipped, at the time at which the shipment ordinarily would have arrived at destination.

CLAIM ADJUSTMENTS—CAUSES OF FRICTION.—The adjustment of claims has always been a cause of controversy and antagonism between carriers and shippers or receivers of freight. The **principle governing many claim agents** has been to endeavor to adjust a claim **on the basis of compromise,** no matter how just and reasonable the claim might be and regardless of the fact that the carrier was solely responsible for the loss. Skill on the part of this class of claim agents in effecting settlements by compromise was deemed an indication of exceptional ability, and claimants almost invariably accepted a compromise offer of adjustment rather than incur the expense incident to legal proceedings in order to collect a claim. Shippers, on the other hand, have sometimes endeavored to collect unjust claims and have resorted to many reprehensible practices in order to "get the better" of carriers. Any shipper or receiver, who for the sake of collecting a few dollars, will stand on the strictest technicalities without considering the equities of the case or the general principles involved, will very quickly place his concern before the carriers in a most unfavorable light.

During the past few years there has been a growing **spirit of cooperation** between carriers and the shipping public. There are many reasons for this change in attitude. Carriers have become conscious of the effect of their past methods and the adverse sentiment caused thereby. They have also suffered severely from overzealous regulation, and it has become necessary for them to win the good opinion of the public. Competition in securing business, so far as offering lower rates, is concerned, has been eliminated, so that the only inducements which a carrier may now offer for patronage are good service and prompt adjustment of claims. The policy of the present day is promptly to establish the validity of claims and not to endeavor to compromise or avoid liability. A stimulant to this spirit of cooperation has been the establishment of laws and regulations which have brought the interests of shippers and carriers closer together.

The following are the **principal causes of claims** for loss and damage for which **shippers are responsible:** Use of containers of insufficient strength to withstand the necessary handling in transit; use of containers which do not comply with classification rules and specifications; improper packing of containers; contents of cars loaded by shippers improperly stowed, braced, or skidded; careless inspection of cars prior to loading. The various **kinds of claims presented to carriers** may be designated as follows:

Overcharge in rate or weight	Damage
Loss or shortage	Concealed damage
Concealed loss	Unreasonable service

FILING OF CLAIMS.—Claims for overcharge should be filed with the agent who collected the charges; that is, if charges are "prepaid," by shipper with the billing agent at point of shipment; if charges are "to collect," by consignee with the delivery agent at destination. Claims for overcharge in rate should be made out on the **standard form** used for this purpose. The authority for rate claimed, tariff reference, I. C. C. number, effective date and page, should be shown. Claim papers should be arranged in the order given below and be fastened together with a suitable fastener:

Letter of transmission
Standard form (if for O/C in rate)
Claim base (if for O/C in weight)
Certificate of weight (if for O/C in weight)
Original paid freight bill
Original bill of lading

Claims for loss, shortage and damage should be filed by consignee with the agent who delivered the goods, because his office is the proper channel, and it insures prompt action and expedites adjustment. Claim papers should be arranged in the following order:

Letter of transmission
Claim base
Certificate of weight
Certified copy of invoice
Bill for cost of repairs (if for damage)
Trace papers (if for shortage)
Paid freight bill
Original bill of lading

Claims for concealed loss or damage should be filed by consignee with the agent who delivered the property for the reasons cited in the preceding paragraph. Concealed loss or damage means a loss or damage which is not readily discernible at time of delivery by carrier but is detected upon opening or unpacking containers. As soon as a concealed loss or damage is discovered, report should be made to the delivery agent, who should be requested to promptly send a representative to inspect the goods. Claim papers should be arranged in the following order:

Letter of transmission
Claim base
Certified copy of invoice
Bill for cost of repairs (if for damage)
Affidavit of consignee (if required)
Affidavit of consignor (if required)
Relevant correspondence
Original paid freight bill
Original bill of lading

In support of claims for concealed loss or damage, carriers frequently demand **affidavits** of the person who packed the goods and of the person who unpacked them at destination. It is very difficult for large shippers and receivers to furnish affidavits of this nature, and the certification of any reputable firm as to the correctness of claims should be sufficient.

Unreasonable service is excessive delay in transportation of property by carriers in consequence whereof loss or damage is sustained attributable to one of the following causes:

1. A decrease in price or value during the period of delay.
2. Expenses or penalties incurred by shippers or consignees because of the delay.
3. Loss of sale of seasonable goods.
4. Damage to perishable freight because of deterioration during the period of the delay.

If the time consumed by the carriers in transporting property is excessive, that is, considerably more than the usual or average time needed to move property of like kind, it is fair to infer that the delay is unreasonable in and the burden of proof to the contrary will rest upon the carrier. In determining what is a reasonable time of transit for any particular shipment, it is necessary to consider the character of the goods, conditions of weather en route, and other circumstances beyond the control of the carrier. Claims of this nature are very **difficult to collect** unless they are supported by indisputable evidence. Consignees should accept delivery of all delayed shipments unless worthless, and file claims consistent with any damage or depreciation chargeable to the delay. When **perishable or seasonable merchandise** is delayed in transit, thereby causing loss, arrangements should be made with the delivering agent as to the best method of disposing of it. Claim should be made for the actual loss sustained because of the delay, and if the goods are sold the amount realized should be deducted. The acceptance of damaged or delayed shipments does not in any way jeopardize any just claim which the owner may have against the carrier. Claim papers should be arranged in the following order:

Letter of transmission
Claim base
Certified copy of invoice
Original account of sales (if goods are sold)
Trace papers
Original paid freight bill
Original bill of lading

PROMPT FILING OF CLAIMS ESSENTIAL.—Claims should be filed with carriers as soon as practicable. **Claims for shortages** should be filed as soon as discovered. **Claims for non-delivery** should be filed within 60 days of the date of bill of lading. **Loss or damage claims** must be filed with the carrier within 6 months of the date of delivery, or, in case of inability to make delivery owing to absolute loss, within 6 months after a reasonable time for delivery has elapsed.

Export Traffic

HANDLING MORE INTRICATE.—The problems encountered in handling export traffic are entirely different from those which arise in the handling of domestic traffic. The problems are intricate because export traffic is handled in many different ways; in fact, there are rarely two shipments entirely alike—each one stands on its own merits and has to be handled accordingly. There are no two countries in the world to which the same regulations apply. In many countries the laws are constantly changing and the consular regulations are very strict. Consequently, it requires constant vigilance to keep out of trouble, because heavy fines are imposed by the officials of those countries on shipments which have been handled incorrectly.

PACKING LIST.—Before export goods are packed, they should be carefully laid out where no possible danger of confusion exists and checked with the

invoice. A packing list should be made **in triplicate** showing the exact contents of each package, and one copy of this list should be placed inside the package, one copy should be sent to consignee, and the third copy should be retained by the shipper. The packer must be absolutely certain that exactly the goods ordered and invoiced are actually packed and shipped. Each packing list should be signed by the man who packed the goods listed thereon.

WEIGHING GOODS BEFORE PACKING.—The contents of each case should be carefully weighed before packing for the reason that the net weight of goods is always necessary in export trade, and in exporting to some countries it is necessary to give the legal weight. On some shipments the legal weight is required in Mexico, the Argentine, and some other countries. **Duties** in these countries are sometimes imposed on the gross weight, sometimes on the net weight, and sometimes on the legal weight. These terms are thus defined in Mexico:

"**Net weight** is the intrinsic weight of the merchandise alone without any packing; **legal weight** includes the interior wrappings containing the articles which are packed with the articles in the outside container; **gross weight** is the weight of the entire package as shipped. Legal weight in all countries making this distinction is much the same; viz., the net weight of the naked goods plus the weight of cartons and other immediate packing."

An exceptionally good handbook for exporters is the Exporter's Encyclopaedia which gives explicit instructions for proper packing of export shipments, together with a lot of other valuable information about exporting.

MARKING PACKAGES.—The marking of packages is a very important part in export shipping. All packages must be distinctly marked to the port of final destination and with the name of the consignee. It is preferable, however, to mark the packages with a **symbol or private sign** which will identify the packages and their consignee, for, as a general rule, the consignee's name in full is not shown on cases; symbols are used instead. The reasons for this practice are quick identification of the goods when loading, unloading, and in the shipping manifest. Abbreviation, or the use of a symbol, also facilitates the preparation of shipping papers and conceals the actual name of consignee which often may be desirable. Marks should be stenciled on packages whenever possible. The use of a shellac coating over stencil marks may be used, as it has proved effective in protecting the marks from rubbing, blotting or chafing.

NECESSARY MARKS.—The essential marks are: the symbol of the consignee; the name of the port, usually placed underneath the symbol; the serial number of the case, the gross and net weights (legal weight when required) in pounds or kilos, or in both, as may be required; the measurement of length, breadth, and thickness of the package in feet and inches.

OCEAN FREIGHT RATES.—Most of the steamship companies name rates **on the basis either of weight or measurement,** ship's option; that is, they will charge rates on the basis that will yield the greatest revenue. There are some commodities, however, that the steamship companies take on a weight basis, regardless of measurement. As a rule, shipments weighing 56 lbs. or more to the cubic foot will be charged for on the basis of weight. But there are few commodities that weigh as much as 56 lbs. to the cubic foot. Hence it follows that most of ocean freight rates are assessed on a measurement basis.

Railway Express and Parcel Post

RAILWAY EXPRESS SERVICE.—The express service is a very desirable agency for transporting shipments when **quick delivery** is essential; also for

transporting less than carload shipments of **perishable property.** Express service should always be used for transporting highly **valuable articles,** valuable papers, money, etc., because it is reliable, responsible, and in case of loss or damage the company is liable for the full value. Any shipment of ordinary merchandise, weighing **40 lbs. or less,** should be shipped by express or parcel post, whichever makes the lower charge. There are **two railway express companies** in the United States, the Southeastern, which operates on the lines of the Southern Railway and a few connecting roads, and the American Railway Express Co., which operates on the other railroads of the country. The latter company was formed in 1918 by the unification of the railway express services of the Adams, the American, the Southern and the Wells Fargo companies.

In order to save transportation charges and avoid dissatisfaction, the **packing requirements** specified in the Official Express Classification should be read and strictly observed. A copy of the current classification may be obtained at any express office on application. Shipments should be marked in the same manner as less than carload shipments forwarded as freight, but in addition the value must be marked on each shipment and the name and address of shippers should be placed inside of packages.

How Knowledge of Rules May Effect Economy.—If a shipper has several shipments for the same consignee taking the same class rate, say 1st class (most all shipments of ordinary merchandise take 1st class rates), only one shipping receipt should be made out for the lot, and the weights should be aggregated. **Example:** Suppose a customer bought four separate articles in different departments of a large store in New York City and requested that they be sent by express to Titusville, Pa. When packed, they weigh 15 lbs., 20 lbs., 25 lbs. and 30 lbs., respectively.

If the packages were shipped on separate receipts, charges would be:	
15 lbs.—Scale No. 47	$ .72
20 " " " 47	.84
25 " " " 47	.96
30 " " " 47	1.08
	$3.60
If shipped on one receipt with weights aggregated, charges would be:	
90 lbs.—Scale No. 47	$2.55
Saving effected	$1.05

The 3rd class rate is 1 cent for each 2 ounces, or fraction thereof, or 8 cents per pound to any point in the United States. Printed matter is practically the only commodity to which this rate is applicable. Printed books, when properly packed, are entitled to the application of this rate. If the invoice value of a shipment of books, to be forwarded from New York City to San Francisco, amounts to $150, and it is shipped in one case weighing 220 lbs., it would be charged at 1st class rate—$28.27 plus valuation charge of 10 cents, or a total of $28.37. If shipped in 15 bundles, wrapped with paper according to classification specifications, each package being marked "Value Not Exceeding $10.00," the same notation entered on receipt and a separate receipt made out for each bundle, the weight would probably be reduced to 210 lbs., and the charge would be at 3rd class rate, which would amount to $16.80, effecting a saving of $11.57.

Claims for Loss or Damage.—Claims for loss or damage may be filed with the local express agent or direct with the claim agent. But in all cases claims must be entered at the place at which claimant desires payment made. On receipt of a claim at the claim bureau of the express company, a number is

assigned to it and prompt acknowledgment sent to the claimant showing the number assigned—also claimant's number, if any, and within six months of the date of claim the express company must notify the claimant in writing of the disposition made thereof. When occasion arises to correspond with the express company regarding a pending claim, the claim agent or other official handling the claim should be addressed and his file reference quoted. Otherwise there may be delay in matching up the correspondence.

Any loss or damage found to exist after delivery should be reported to the company's agent immediately upon discovery by consignee. When such loss or damage is not discovered until after shipment has been opened, container and contents should be kept together, particular care being taken to preserve all portions of the wrapping bearing names, addresses, marks, numbers, labels, etc., until the express company's representative can make an inspection. In case of shortage in contents, weigh the shipment.

Acceptance of Damaged Goods.—Pending the settlement of any dispute or disagreement between the consignee and a delivery-man or other representative of the express company, as to questions of damage in connection with property transported, the consignee should avoid further loss or damage by promptly accepting the property, because it is the duty of consignee to salvage such shipments. Such action on his part in no way affects any valid claim which may exist against the company. It is not necessary for a shipper or consignee to prepare and file formal **claim for overcharges** with the express company. Upon verification of an overcharge an express agent is authorized to immediately make refund and to take receipt therefor.

Time for Filing Claims.—Claims for loss or damage must be entered within 6 months after delivery of the property, or, in case of failure to make delivery, then within 6 months and 15 days after date of shipment; and suits for loss or damage must be instituted within 2 years and 1 day after the date when notice in writing is given by the express company to the claimant that the company has disallowed the claim. All claims should be presented with as little delay as possible, and it is particularly important that claims for concealed loss or damage be entered promptly. The express company provides a "Blank for Presentation of Loss and Damage Claims," which when properly prepared by claimants, gives the information necessary for proper investigation. Claim papers should be arranged in the following order:

Letter of transmission
Claim base (express company's form)
Certified copy of invoice
Other particulars obtainable in proof of loss or damage
Certified copy of the original receipt, if available

FOREIGN EXPRESS.—When foreign express service is compared with the express service accorded in this country there is not much similarity, because foreign express matter cannot travel any faster than ordinary cargo, since it is transported on the same steamer. The American Express Co. is the principal company transporting express matter in ocean traffic, and from a traffic standpoint, this company is interested only in the handling of shipments destined to non-adjacent foreign countries or originating in non-adjacent foreign countries. The express company, in behalf of its clients, negotiates for cargo space, arranges for forwarding shipments from seaboard, issues through bills of lading, prepares the necessary consular documents and arranges for marine insurance when required.

In addition to its traffic activities, the **financial department** of the company affords facilities for collection of drafts; the establishment of credits, under which payments are made against presentation of proper shipping documents; the sale and purchase of foreign exchange; and for supplying travelers' checks cashed throughout the civilized world.

PARCEL POST SERVICE.—Domestic parcel post service offers a convenient and efficient means of transporting small parcels to any point in the United States or its possessions. The chief advantage offered is the low rates on short distance traffic, and for forwarding packages to places not reached by railroads or steamboats. The **weight of packages** forwarded by parcel post is limited to 70 lbs. for the first three zones, and to 50 lbs. for all other zones. Parcel post packages **must not exceed 84 inches in length and girth combined.** The most convenient way of measuring a package is by means of a tape line 7 feet long; so much of the tape as is not used in measuring the length is the measure of the maximum girth permissible. For parcel post purposes the United States is divided into **eight zones,** each zone being subdivided into a number of units. The number of each unit is shown after the name of the office in the state list of the **Official Postal Guide.** The Guide shows a **table of rates** applicable to the different zones, but a separate zone key, which is furnished by the Post Office Department to each purchaser of a Guide, is required for each unit. An **additional charge** of 2 cents per parcel is made, designated as a "service charge." A new feature is the institution of a **"special handling service,"** under which a parcel post shipment at an additional postage expense of 25 cents will be accorded the same expeditious handling that is given first class mail matter.

The **charge for insurance** is as follows:

5	cents	For	indemnity	not	exceeding	.....	$ 5.00
8	"	"	"	"	"	.....	25.00
10	"	"	"	"	"	.....	50.00
25	"	"	"	"	"	.....	100.00

The fees for insurance are in addition to the postage. All fees, service charges, and postage must be prepaid with stamps affixed. Therefore, when figuring the total charge on any shipment by parcel post, it is necessary to consider the regular zone rate, plus insurance, plus a service charge of 2 cents, and if special handling is desired, plus 25 cents postage in addition.

FOREIGN PARCEL POST SERVICE.—**Small orders** may frequently be sent to foreign customers by foreign parcel post at **much less expense** than by other agencies, and usually the transportation is much quicker. There is a **weight limit** on each package, which varies in different countries. To overcome this regulation when a shipment exceeds the weight limit, it may be divided into several packages, if possible, and thereby comply with the weight requirements. Some foreign importers prefer to have small shipments sent by parcel post even though the cost is higher than by other agencies, because in many countries the **custom house regulations on parcel post matter** are not so strict as when goods are forwarded as steamship cargo. Another advantage is that it is rarely necessary to employ a custom house broker to get the goods forwarded by parcel post; while, on the other hand, a broker is essential when a cargo has to be cleared through the Custom House in the usual way, regardless of whether the shipment consists of a single package or a thousand cases.

Small **packages of samples,** not exceeding 12 ounces, gross weight, may be sent to most of the foreign countries at a very low rate of postage. The regulations do not permit sending samples of all articles, but samples of many articles may be sent by this service. This is a valuable service and affords a

quick way of putting samples in the hands of foreign importers at small expense. When a **heavy lot of documents of no special value** have to be sent abroad, considerable postage can often be saved by mailing them in an unsealed package, labeled "Commercial Papers." Bills of lading, invoices or copies, etc., come under this classification.

Each package must be securely packed, but in such a way that it can be opened without damaging its cover, in order that its contents may be easily examined by postmasters and customs officials. It should be plainly marked with ink, in English characters, giving the name and full address of the person for whom the package is intended. The name and address of the sender preceded by the word "From" should be written on the package. It must also be marked "Parcel Post." The **greatest length permitted** for packages forwarded by parcel post to foreign countries is 3 feet, 6 inches, and the greatest length and girth combined must not exceed 6 feet, but some exceptions are shown in the Postal Guide. Packages should be measured with a tape line 6 feet long in the same manner as described for measuring domestic parcel post packages.

Customs Declaration.—A customs declaration must be correctly filled out and attached to each package in such a manner that it does not seal or close the package and so that it may be easily opened without damaging the cover. The customs declaration should be tied to the package by means of a cord passed through the eyelet and should be bound to the parcel so that it lies flat thereon and cannot be used as a handle to lift the package while in transit.

SECTION 21

TRANSPORTATION RATES

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SECTION 21

TRANSPORTATION RATES

All common carriers, and particularly the railroads, the most important common carriers by land, occupy, because of the peculiar nature of their function, a legal and an economic position in the business fabric which is quite different from the position occupied by the ordinary private business establishment. The prices which carriers may charge, the liability of carriers for the goods entrusted to them for transportation, and the relations of the carriers to the shippers whom they serve, are subject to many and diverse legal restrictions and regulations.

No attempt is made in this section to deal with all the problems involved in the relations between shippers and carriers, which subject is more completely covered in the section on Traffic Management. The purpose of this section is to set forth the fundamental facts with respect to transportation rates, and the methods by which they are established and the leading principles of their regulation.

Railroad Rates and Charges

PUBLICATION OF RAILROAD RATES.—The law requires that railroad rates be published and kept on file for public inspection. State laws require the publication of rates applicable only to intrastate traffic, while federal law requires the publication of the rates applicable to interstate shipments. Rates on all interstate traffic must be filed, too, with the Interstate Commerce Commission at Washington. Most of the rates applicable primarily to intrastate freight shipments are filed with the Interstate Commerce Commission, since it is customary for rail carriers to use these rates, in combination with others, to make rates on many interstate shipments. The publication and filing of nearly all freight rates, therefore, comes under the supervision and control of the Interstate Commerce Commission, and it is seldom necessary to consider the regulations of individual states with respect to the mere technical formalities involved in the publication and filing of the charges imposed for railway transportation service.

PUBLISHED RATES ARE THE LEGAL RATES.—The published railroad rate is the **legal rate,** the only rate which the carrier may lawfully collect from the shipper, the only rate which the shipper is by law obliged to pay. Since all rates must be published, and since the law requires the schedules of charges to be made available for public inspection, the **shipper is presumed to know the correct rate** applicable to any shipment which he desires to make. While it is customary for shippers to secure information concerning railroad rates from the agents of the railroads, any error on the part of an agent in the quotation of a rate does not render the carrier liable for payment of damages to the

ipper. A shipper has the right to demand from the agent of a railroad a ritten statement of any rate to which the railroad is a party. But even if ie agent makes an error, thereby causing the shipper to suffer damages, the rrier is liable only to a penalty of $250, which accrues to the federal govern- ent. The shipper must pay the legal rate, regardless of the incorrect informa- on obtained from the carrier's agent, and he cannot recover damages, however reat his loss may have been.

ADVANTAGES OF PUBLICATION OF RAILROAD RATES.—The publi- tion of railroad rates has many practical advantages. It insures **equality of eatment** between shippers at the same points. It enables shippers to know advance the transportation charges applicable to their freight. From every ilroad station in the United States there is in effect—published and filed ith governmental agencies, and also filed for public inspection—a rate or a mbination of rates to every other railroad station in the country, for any ticle of freight which may be offered for rail transportation.

KINDS OF RATES.—There are many railroads in the United States. The merous freight stations are located on lines belonging to many different ilroad companies. To have rates between all stations, there must be rates plying not only between stations situated on the same railroad, but applying so between stations situated on different lines.

Local Rates.—The rates between stations located on the same line are own as "local rates." They are single rates applying from point of origin point of destination.

Joint Rates.—When a shipment moves from a station on one railroad to a ation on another road, passing perhaps over one or more intermediate lines the course of its journey, the rate applicable may be a single rate for the tire movement, made by agreement among the connecting lines. Such a gle rate, applying between stations on different railroads, is known as a oint rate."

Combination Rates.—If no single joint rate is in effect between two stations cated on different lines, a shipment moving between those stations will be arged a "combination rate," made up of the sum of the rates in effect between nction points of the connecting lines.

PRECEDENCE OF JOINT RATES OVER COMBINATION RATES.—All nt rates must be made by agreement among the interested roads. Where **joint rate** exists between two points, it is the **legal rate** and the rate which ust be collected, even though at the time there may be a lower combination te over the route of movement. If no joint rate is in effect between points cated on different roads, the legal rate is the lowest combination available er the route of movement. It will be seen that a combination rate may be e sum of two or more local rates, the sum of two or more joint rates, or the m of both local and joint rates, depending upon the kinds of rates in effect er the route which a shipment follows.

PROPORTIONAL RATES.—Frequently railroads publish what are known "proportional" rates. These rates are to be used only in connection with ner rates, **to form combination rates.** An **illustration** will indicate the nature proportional rates. On railroad X the local rate for a certain shipment from to B is 30 cents per 100 lb. The local rate for this shipment between B and on railroad Y is 60 cents per 100 lb. In the absence of a joint rate from A C, made by agreement between X and Y, the through rate from A to C on s shipment would ordinarily be the sum of the two local rates, or 90 cents.

But railroad Y may publish proportional rates between B and C, applicable on traffic originating at A, lower than the regular local rates from B to C. Assume that Y publishes a proportional rate of 50 cents per 100 lb., applicable to this shipment from A. In this case the through rate on the shipment from A to C would be the sum of the local rate from A to B and the proportional rate from B to C, or 80 cents. The proportional rate would not be used, however, except as a factor in the combination rate from A to C. The local rate on a shipment of the same kind, originating at B and destined to C, would still be 60 cents.

ADVANTAGES OF JOINT RATES.—Joint rates are a great convenience to shippers, and a source of economy to carriers. The ascertainment of charges applicable to freight moving between two widely separate points located on different railroads is manifestly more simple where single rates are in effect for the entire movement, rather than a combination rate made up of several factors. The railroads of the United States have many joint rates, and the number of such rates is increasing steadily. The Interstate Commerce Commission has the power to order connecting carriers to establish through routes and joint rates, when the Commission deems it to be in the interest of the public to do so.

"BREAKING" FREIGHT MOVEMENT TO EVADE THROUGH RATE UNLAWFUL.—A shipper may not legally "break" the movement of a freight shipment for the purpose of evading the payment of a rate which is higher than an available combination. It seldom occurs that a joint interstate rate exceeds the aggregate of intermediate rates, because such a rate is prohibited, unless expressly authorized by the Interstate Commerce Commission. However, a shipper in the interior of a state might find, applicable to a point near the state boundary, a low intrastate rate, which, in combination with an interstate rate beyond, would make a lower total charge than an interstate rate from point of origin to point of final destination. He might ship to the point near the boundary, accept delivery, and immediately reship. Such a practice would be **unlawful,** and if it could be shown that the transportation was interrupted merely for the purpose of defeating the higher but legally applicable rate, the interested carriers could recover from the shipper the amount due on the basis of the higher rate.

CLASSIFICATION OF FREIGHT.—There are thousands of articles of freight for which railroad rates must be published, and there are also thousands of stations to and from all of which these rates must apply. The carriers must thus adopt methods of simplifying the process of rate publication—methods which will reduce the complexity involved in establishing rates on thousands of articles between thousands of stations.

The first step in the simplification process is the "classification" of freight. Classification consists merely of dividing the articles transported into a limited number of groups or "classes," with the understanding that all articles in the same class will be charged for alike. Classification has the effect of reducing the number of articles carried as freight from several thousand to a dozen or so, depending upon the number of classes decided upon. The classification accomplished, rates are made, not upon the individual articles, but upon the classes. When an article is charged for according to the class in which it falls, it is said to be governed by a **class rate.**

Classification does not determine the actual rate which an article will take, but it does determine the **relationships of the rates** upon different articles. One cannot determine from a freight classification, the rate applicable to an

ticle, but one can discern whether a certain article will be subjected to the ne rate that some other article bears, or to a lower or higher rate.

COMMODITY RATES.—Not all articles are subject to class rates. Virtu- y all railroads quote rates specifically applicable to certain kinds of freight. ch rates are known as "commodity rates." These rates are usually, though t always, somewhat lower than class rates. Coal, ore, lumber, and other v-grade articles of freight are usually governed by commodity rates instead class rates. Commodity rates are, as a rule, applicable only to carload pments, though occasionally one may find commodity rates applicable to s than carload shipments. Whenever a commodity rate is established upon y article, it **supersedes the class rate** on that article, and becomes the legally plicable rate, whether higher or lower than the class rate, unless it is pub- ned in the same tariff with the class rate, and the tariff specifically authorizes e alternative use of the two rates.

Carload commodity rates and carload class ratings invariably provide for **arload minimum weights"** to be used in connection with the rates or the ings. The rate or the rating will not apply for a weight less than that in- ated in the carload minimum. Both class rates and commodity rates may joint or local. A combination rate may consist of the sum of both class and mmodity rates. Proportional rates, used as factors in combination rates, y likewise be either class or commodity.

EXPORT AND IMPORT RATES.—Railroads frequently publish rates plicable only to goods which have been imported or to goods destined for port. Such rates are in reality a **special type of proportional rates.** They not applicable to shipments wholly domestic. Export rates and import es may be either class or commodity rates, that is, applicable to classes of ght, or to specific commodities. In nearly all cases the export and import es are lower than the domestic rates. The Merchant Marine Act of 1920, encourage the shipping industry of the United States, provided that the rail port and import rates of this country should be applied only in the case of ds carried in American ships. It stipulated, however, that this rule could suspended by the Shipping Board, and as a result of the action of that body rule has not yet become effective.

CLASSIFICATION OF NEW ARTICLES.—When a new article is offered rail transportation, an article not already listed in the classification, an plication is made for a rating, either directly to the classification committees, through an agent of a carrier. Until a definite rating is assigned, the article classified in accordance with the so-called **"analogous rule,"** that is, it is into the same class with articles, already listed, which it most nearly re- ables.

REVISION OF THE CONSOLIDATED CLASSIFICATION.—The Con- dated Classification is revised and republished about every 18 months, ugh there is no definite rule as to the periodicity of issues. The changes de during the time between issues are published in "supplements" to the ctive issue. Each successive issue of the classification cancels the previous e and its effective supplements.

FREIGHT TARIFFS.—The rates applicable to freight traffic are published freight tariffs." The tariff takes its name from the kind of rates it contains. containing only local rates is a "local tariff"; one containing only joint s is a "joint tariff." Some tariffs may contain all kinds of rates—local joint class and commodity rates, proportional class and commodity rates, export and import class and commodity rates. All freight tariffs containing

rates applicable to interstate shipments of freight must be published strictly in accordance with rules promulgated by the Interstate Commerce Commission. These rules are carried in a publication issued by the Commission, known as Tariff Circular 18-A.

Tariffs are uniform in size, eleven inches long and eight inches wide. They are published either by the carriers themselves, or by agents appointed by the carriers and duly authorized to act for them. The tariffs published by agents are called **"agency tariffs,"** while those published by the carriers directly are called **"individual tariffs."** In the publication of tariffs containing rates applicable over a large number of routes and throughout a wide territory, much duplication of effort is avoided by using the agency method. In addition to being a source of economy, agency tariffs simplify greatly the work of ascertaining the rates applicable by different routes.

Each freight tariff contains an **"I. C. C. number"** for filing and for reference. The I. C. C. number of an individual tariff is that of the carrier by which it is published, while in the case of an agency tariff it is that of the agent. In addition to the I. C. C. number a tariff usually bears the file number or identification number of the carrier or of the agent by which it is published.

UNIFORM TARIFF CONSTRUCTION.—Since the publication of freight tariffs is governed by uniform rules established by the Interstate Commerce Commission, they are all constructed upon the same general plan, differences arising only from the nature of the rates which they contain or from the number of places to which their rates apply. Joint tariffs will differ from local tariffs, for instance, in that they must indicate all the carriers which are parties to the joint rates. Commodity tariffs differ from class tariffs, in that they necessarily must contain the names of the articles upon which specific rates are given. All tariffs contain rules and directions necessary for their interpretation and application.

BLANKET RATES.—It is usually found that in a tariff containing rates applicable over a very wide area of country, a large number of points are given the same, or almost the same rates. When the same rates are made **applicable to all stations in a large territory,** the rates are sometimes referred to as "blanket" rates. There are some commodity rates from Eastern points which are the same to virtually every point west of the Missouri River, the "blanket" in this case being very extensive.

NEW TARIFFS AND SUPPLEMENTS.—Changes in freight tariffs—especially the larger ones—must be made with considerable frequency, because of the additions of new stations and the modification of rates to particular points. No change in rates may be made, however, except on thirty days' notice to the Interstate Commerce Commission and to the public, unless the Commission gives consent to shorter notice.

When many rate changes are to be made in a tariff, it is customary to re-issue the tariff in its entirety. When only a few changes are to be made, they are published as **supplements to the tariff.** Since the existence of a large number of supplements to a single tariff would cause confusion and perhaps entail considerable work in the ascertainment of the correct rates, the Interstate Commerce Commission fixes a **limit to the number of supplements** which may be in effect at one time. The number permissible varies with the size of the tariffs. The largest tariff may not have more than three ordinary supplements, a tariff of 17 to 111 pages not more than two, a tariff of 5 to 16 pages not more than 1, and a tariff of less than five pages no supplements at all. Under certain circumstances the Commission permits a deviation from the rule with respect

he number of supplements, additional ones being authorized for the purpose iving notice of orders of the Commission suspending the operation of rates, l orders vacating such suspensions.

Supplements to a tariff are numbered consecutively. Each supplement st indicate on the title page which supplement or supplements it cancels, l each must show on the title page what supplements contain all changes n the original tariff that are in effect. Sometimes 50 or 60 supplements to ariff are published before the tariff is re-issued. This means that the matter ried in the earlier supplements must be re-issued in the later ones, in order t the rule with respect to the number which may be in effect at one time will be violated. While there is no limit upon the number of supplements that y be published before a tariff is re-issued, there is a limit upon the size of supplements. For example, a supplement to a tariff of 33 or more pages y not have more than one-fourth the number of pages contained in the tariff lf. When the changes in the original tariff become extremely numerous, tariff must be republished—and the work of supplementing started all r again.

LASS TARIFFS.—Class tariffs contain only class rates. A class tariff does name rates on particular articles of freight, but upon "classes" of freight. h a tariff can be used only in connection with the freight classification, ch shows what articles belong to the classes for which rates are given in the ff. A class tariff is always "governed," therefore, by one particular clas- ation or by a classification and indicated exceptions to that classification. governing classification and the governing exceptions, if any, are invariably ied upon the title page of a class tariff.

OMMODITY TARIFFS.—Commodity tariffs contain only commodity s, on specifically named articles. It is not necessary to use a classification onnection with a commodity tariff for the purpose of ascertaining freight s, but usually a commodity tariff is made subject to the rules of a classifica- , and where this is the case, the classification may be said to govern, to rtain extent, the commodity tariff. Some commodity tariffs contain rates veen certain points on only one article, such as lumber, sand, coal. Some neral" commodity tariffs have rates upon a number of articles, which are d alphabetically in the first part of the tariff. If a tariff giving commodity s between certain points does not give all the commodity rates effective veen those points, it must give reference to the tariff or tariffs in which the r commodity rates may be found.

LASS AND COMMODITY TARIFFS.—A class and commodity tariff ains both class and commodity rates, each kind being published in different ions of the tariff. The tariff may provide for the alternative use of these ions, stipulating that a shipper may use either the class or the commodity , whichever makes the lower charge.

HE RATE TO APPLY.—When a commodity rate is established it super- s the class rate, except in the case where alternative choice is permitted, ust indicated. Ordinarily, therefore, if a commodity rate applies to an le offered for shipment between two points, it is the rate legally applicable ie shipment. If no commodity rate exists, the article will take a class rate, e secured from the class tariff applicable between the two points. Before rate can be determined from the class tariff, it is necessary to ascertain the to which the article belongs. If the class tariff is subject to "exceptions" s governing classification, the exceptions must be consulted, to see if the le is designated therein. If it is, it will take the class indicated by the

exception. If not, the governing classification will apply, and the rate for that class, given in the class tariff, is the properly applicable rate.

TARIFF INDEXES.—All railroads are required to publish and keep up to date indexes of all the tariffs, local and joint, class and commodity, to which they are parties. Brief consultation with the tariff index of a railroad enables a traffic man to know what commodity tariffs are in effect between local points on that railroad, and likewise enables him to know whether joint tariffs—class or commodity—are in effect to points on other railroads. He knows, without seeking, that class rates are published between all local points. If a local commodity tariff, containing rates on the freight which he desires to ship, is not listed, he will at once make use of the proper class tariff. If he contemplates a shipment to a point on another railroad, and the tariff index of the initial line reveals no joint rates in effect to that point, he must work out a combination rate, by consultation with the indexes and the tariffs of connecting lines.

FACTORS DETERMINING FREIGHT RATES.—There are many factors which enter into the determination of freight rates. First, railroad companies are private corporations, engaged in the business of transportation primarily for the sake of profit, and their officers and directors want to keep rates as high as they can be kept, consistent with the development of traffic. They would not deliberately impose rates the effect of which would be to injure their own business. To shippers, on the other hand, the freight rates are a part of the expenses of production. They are interested in keeping down all their production expenses, and they want freight rates to be as low as they can possibly be, consistent with the maintenance of adequate transportation service. There may be many rates higher than the railroads could accept and still earn a profit; there may be rates lower than a shipper would be willing to pay rather than do without railroad service. The opposing interests of shipper and carrier—the forces of supply and demand—have considerable influence upon the level of rates.

COMPETITIVE CONDITIONS IN FREIGHT RATES AND SERVICES.—Various competitive conditions have much to do with the determination of freight rates. In times past there has been intense rivalry among **parallel railroads,** and the competition among them has on many occasions driven rates so low as to be unremunerative. In more recent years this "cutthroat" competition has been eliminated, and the only competition between parallel railroads today, which is of any significance, is **competition in service.** Competition in rates is virtually unknown. The carriers in different traffic regions are all members of "traffic associations," and through these associations they reach agreements on rate matters and maintain a substantial equality of competitive rates.

COMPETITIVE INFLUENCE OF WATER AND OTHER FORMS OF TRANSPORTATION.—While direct competition among railroads has been subjected to effective control, there are other competitive influences which strongly affect the amount which railroad companies may charge for their services. Some parts of the country have the advantage of water transportation in addition to railroad facilities, and where water routes are available, railroad rates are invariably affected by the charges of the water lines. The railroad rates between the Atlantic and the Pacific coasts are influenced by the rates by water through the Panama Canal. The Great Lakes and the Erie Canal have exerted a profound influence upon the railroad rates of the East. The Mississippi and the Ohio rivers, as well as many of the smaller navigable streams of the South, while no longer serving as important carriers of the domestic

nmerce of the United States, nevertheless exert a strong influence upon nsportation rates by rail.

Other competing forms of transportation serve to keep rates on steam rail-ds lower than they might otherwise be. The **electric roads,** local and inter-ban, have had a distinct effect upon both the passenger fares and the freight es of steam rail lines; and the use of **motor buses and motor trucks** for short ul passenger and freight services has likewise led to a reduction in the local es of many railroads.

INDUSTRIAL AND MARKET COMPETITION.—More effective perhaps an the competition of rival transportation agencies are those forms of com-tition known as industrial and market competition. Industrial establish-nts located in widely separated localities endeavor frequently to sell their oducts in the same market. These industrial concerns may be served by ferent railroads, which are entirely non-competitive with respect to the affic actually hauled by either. But the ability of both establishments to ter a competitive market depends upon the relation between the rates charged their respective transportation lines. If one railroad keeps its rates so high to exclude the industrial concern on its line from the competitive market, at railroad misses an opportunity to secure traffic and revenue, which with ver rates it could obtain. This industrial competition brings about a **"balanc-g" of rates** in different parts of the country. The rates on salt from New ork and Michigan to the great meat-packing cities of the Central States are fluenced by the rates on salt shipped to these cities from Kansas and Louisiana, d vice versa. The rates on citrus fruits from California to eastern markets e largely determined by rates on the citrus fruits of Florida. The rates on ined sugar from New York and Baltimore must be balanced against rates refined sugar from New Orleans and San Francisco.

COMPETITION OF SEAPORTS.—The rates on commodities destined for port are influenced by the competition of various seaports for the export ade of the nation. The ports along the Atlantic and Gulf coasts are all ysically in a position to handle much of the export traffic which passes from e interior of the United States to foreign countries the world over. The osperity of the foreign trade of these ports depends in large measure upon e rates accorded by their respective railroads, and to get a share of the export ight the rail carriers serving any one port must see that their rates have a oper relation to the rates charged by the carriers serving other ports. The mpetition among seaports and among the railroads serving the seaports has en a factor of prime importance in the determination of the rates upon export ight.

GOVERNMENT REGULATION OF RAILROAD RATES.—The **most portant factor** affecting the amount which railroads may charge for their rvices today is government regulation. It has been the experience of all untries where railroads are privately owned and operated, that if railroad es are left solely to the determination of competitive influences, various uses arise, resulting in unreasonably high and unjustly discriminatory rates many shippers. The rise of these abuses long ago created a demand for blic regulation of railroad rates, and there is no country in which rates are t subjected to a certain degree of governmental control.

Railroad charges in the United States are subject to regulation both by the deral government and by the governments of the individual states. The deral government has the exclusive right to regulate rates on interstate traffic, d it also has the right to regulate rates on intrastate traffic to the extent

necessary to prevent any discrimination against interstate commerce. Federal regulation is much more important than state regulation, not only because of the greater scope of federal authority, but also because the major portion of the rail traffic of the United States is interstate in character.

INTERSTATE COMMERCE ACT.—The chief federal law for the regulation of rail carriers is the Interstate Commerce Act. This law, known before 1920 as the "Act to Regulate Commerce," was passed originally in 1887. It has been amended many times, the most important changes having been made in 1903, 1906, 1910 and 1920. The Transportation Act of 1920 consisted largely of amendments to the act originally passed in 1887. The Act is based upon **two fundamental principles** laid down in the act itself. These are that the charges for railroad service shall be reasonable, and that they shall not be unduly or unjustly discriminatory, as between places, persons and commodities.

DUTIES AND POWERS OF THE INTERSTATE COMMERCE COMMISSION.—The law establishes an administrative body, known as the Interstate Commerce Commission, whose function and duty it is to see that the principles upon which the law is based are properly enforced. To carry out this duty the Commission is entrusted with a number of important powers, the chief of which are:

1. To declare a rate unreasonable or unduly discriminatory, either upon its own initiative, or upon complaint.
2. To establish the rates on interstate traffic, which a carrier must charge, in place of rates found to be unreasonable or unduly discriminatory.
3. To suspend proposed changes in rates, pending an investigation of their reasonableness.
4. To establish rates on intrastate traffic, when deemed necessary, for the purpose of removing a discrimination against interstate commerce.

The powers of the Commission over the rates and charges of the railroads are limited only by the constitutional provision that property can not be taken without due process of law. In other words, the Commission can not make rates so low as to be **"confiscatory,"** but above the point of confiscation, it has virtually unlimited control of railroad charges.

"FAIR RETURN" RULE IN MAKING RAILROAD RATES.—In exercising its duty to see that rates are reasonable, the Commission must bear in mind reasonableness from the standpoint of the carrier as well as from the standpoint of the shipper. Since 1920 the Interstate Commerce Act has contained a "rule" of rate making for the guidance of the Commission. This rule declares that the carriers as a whole are entitled to a "fair return" upon the value of the property devoted to the transportation service. It is the duty of the Commission to establish the value of the carriers' property, and it is also its duty to decide what is a "fair rate of return" upon this value. For several years the Commission has been engaged in a **valuation of the railroads,** but the work is still far from complete. In 1920, however, it assigned a **tentative value of $18,900,000,000** to all the railroads of the country, in order to reach a decision as to what level of rates should be established to enable the carriers to earn a fair return.

Since the railroads are bound by law to charge only rates that are reasonable and not unduly discriminatory, and since the Interstate Commerce Commission is invested with a large measure of discretionary power in the enforcement of this law, it is manifest that regulation has a telling influence upon the amount which the carriers charge for transportation service.

What is a reasonable rate? When may a rate be said to be unreasonable?

ince the law requires that railroad rates shall be reasonable, the carriers, the ippers, and the Interstate Commerce Commission must give much thought o these questions. It is the endeavor to answer these questions that has given se to much discussion of the **"theory of railroad rates."**

"COST OF SERVICE" AS A FACTOR IN MAKING RATES.—There are **any aspects to the theory** of railroad rates. With respect to the general level rates, it is now an accepted principle that the **governing consideration** should e the "cost of service." Railroads are entitled to a fair return upon the value the property devoted to transportation service, which means merely that he level of rates should be sufficiently high to pay for the cost of railroad service nd leave a fair profit upon the value of the property employed in the production transportation.

COST OF SERVICE THEORY AND INDIVIDUAL RATES.—The cost of rvice theory is likewise of great importance in testing the reasonableness of dividual rates, though it is impossible to apply the principle with any large egree of exactitude. Many of the costs of railroad transportation are **joint osts,** and it is, therefore, quite out of the question to determine exactly the ost of carrying any particular article of traffic. Moreover, a very large pro- portion of the costs of transportation are **fixed or constant.** Some authorities timate that at least 60% of the cost of operating a railroad is not affected by rdinary variations in the volume of traffic. Even if it were possible to separate e costs for each article shipped, and if it were possible to work out an exact rmula for the distribution of the constant costs against the different kinds of eight, it would not necessarily follow that it should be done, in order to tablish reasonable rates. Sound considerations of business policy and of ublic policy may well justify an unequal distribution of the constant costs. many lines of business activity it is found advisable, both from a business d from a social standpoint, to exact a higher charge for a certain service than r another service which it obviously costs less to perform.

The cost element is nevertheless an important factor in the determination the reasonableness of individual rates, though its application represents mparison and approximation rather than definite measurement. It is not cessary to know how much it costs to haul a carload of freight 100 miles in der to know that it costs more to haul it 200 miles. It is not necessary to ow how much it costs to haul a ton of a certain commodity in order to know at it costs more to haul two tons. It is not necessary to know how much costs to haul a carload of an article to know that it costs less per 100 lb. an to haul less than a carload of the same article. It costs more proportion- ely to haul freight in a refrigerator car than in an ordinary box car, more ually to haul in a box car than in an open top car. Without having an exact easure of cost it is possible to test the reasonableness of rates on an individual mmodity by a process of comparison, comparing its transportation in one rritory with the transportation of a similar article in the same territory or th the transportation of the same article in a similar territory. It is the cost transportation which is the **basis of the test of reasonableness** in such com- risons, and it is by such comparisons primarily that decisions as to the asonableness of individual rates are finally reached. Other things being ual, where costs are obviously approximately the same there is no justifi- tion for difference in rates.

DISCRIMINATORY RATES.—The test of discrimination is likewise often matter of comparison. The problem of discrimination is different, however, om the problem of reasonableness, for discrimination may be and often is

permitted. The problem centers upon the question of when a discrimination in rates is undue or unjust. A common example of discrimination arises when a railroad, because of the existence of water competition, charges more for a **shorter than for a longer distance over the same line or route in the same direction,** the shorter being included within the longer distance. Specific mention of this particular form of discrimination was made in the fourth section of the Interstate Commerce Act, as it was originally passed, and the right to exact a greater charge for the shorter distance has long been contingent upon the express consent of the Interstate Commerce Commission. Not infrequently the Commission has permitted departures from the fourth section, despite the objections of shippers and consignees at short-haul points. For many years various interests who have strongly objected to this type of discrimination have tried to get Congress to enact a law depriving the Commission of its discretionary power relating to the fourth section of the act.

Considering the cost of service alone as the determining factor in rate making, group rates or blanket rates involve discrimination—the nearer point being subjected, not to a higher rate, but to the same rate as the more distant point. But such discrimination—even when discrimination may be admitted—is not necessarily undue, and group rates are a very common occurrence in the rate structures of the country.

MEASURE OF THE RATE.—The important position which cost of service occupies in rate making is indicated by the fact that the bases most commonly employed in establishing rates are **weight and distance.** Virtually all freight rates are quoted as so much per 100 lb. or per ton. In the classification of freight, weight in proportion to bulk is the chief factor, though **risk** and the **value** of the article—the **ability to "stand" a high rate**—are also important considerations. The **importance of distance** in the determination of rate relationship has been emphasized more and more in recent years, and in several parts of the United States a scheme has been adopted for the construction of rates purely upon a mileage basis.

MILEAGE SCALES.—The application of the distance principle to class rates has been accomplished by working out mileage scales to be employed in establishing the rates from station to station. In 1917 the Interstate Commerce Commission brought about the adoption of a **scale of class rates** in Central Freight Association Territory (that part of Official Classification Territory west of Buffalo and Pittsburgh) which will serve to illustrate this method of rate making. The territory was divided into six lettered "zones" and a mileage scale established for each zone. In the largest zone, Zone A, the first-class rate for distances up to 5 miles was made 16 cents per 100 lb. For each 5-mile increase in distance, up to 50 miles, this rate increased by 1 cent. From 50 to 100 miles there was an increase of ½ cent for each 5-mile increase in distance. From 100 to 200 miles there was an increase of 1 cent for each 10-mile "block," and from 200 to 300 miles an increase of ½ cent for each 10-mile block. Beyond 300 miles the first-class rate increased 1 cent for each 20 miles. The rates on the other five numbered classes of Official Classification bore a fixed percentage relationship to the first-class rates. This relationship was as follows:

1st Class	2nd Class	3rd Class	4th Class	5th Class	6th Class
100%	85%	67%	50%	35%	28%

A similar scale was established for the other zones, and the same relationship observed between the different classes. Various increases in rates, and one general decrease, since 1917, have modified the rates originally established

er this scale, and there has been some slight deviation from the original
rcatage relationships of the 6 classes, but the mileage scale system of making
s rates has been preserved. Commodity rates in this territory are likewise
d primarily upon mileage.

1 1918 a mileage scale of rates was adopted in New England, similar to the
e established the previous year in Central Freight Association Territory.
several parts of the South and Southwest mileage scales have been put into
t, and just now the Commission has under consideration a mileage scale of
s rates to be made applicable throughout the entire Southern Classification
ritory. A mileage scale has also been proposed for Trunk Line Territory
t part of Official Classification Territory between New England and Central
ight Association Territory) and this scale is also being considered by the
erstate Commerce Commission.

ERCENTAGE SYSTEM.—Though the exact application of the distance
ciple is not so general in the making of rates for long distances as in the
king of rates for short hauls, distance is often the **factor of chief importance**
n in long distance rates. A good example of the application of the distance
ciple occurs in the rate structure which has long been in effect with respect
raffic passing between New England and Trunk Line Territories on one
, and Central Freight Association Territory on the other. This rate structure
sually called **the percentage system.**

The rate between New York and Chicago is the yardstick by which all other
es in this structure are measured. The rate from New York to any point in
tral Freight Association Territory is a certain percentage of the rate from
v York to Chicago. Formerly this percentage was roughly the ratio which
distance from New York to the point in question bore to the distance from
v York to Chicago. Central Freight Association Territory is now divided
"percentage groups," all points in a group taking the same rates from
v York. The first-class rate from New York to Chicago is now $1.42 per
lb. Indianapolis, located in the 93% group, takes 93% of the New York-
cago rate, or $1.32 per 100 lb. Pittsburgh takes 60% of the New York-
cago rate, St. Louis 117%, Cleveland 71%, and Cincinnati 87%. Distance
ne element which determines the percentages.

The rates from Eastern stations other than New York to Chicago and other
nts in Central Freight Association Territory bear a definite relation to the
s from New York. Inland stations, such as Albany, Syracuse, Rochester,
nton and Williamsport—each the center of a group—as a rule take rates
ch are percentages of the New York rates, but the **North Atlantic ports**
ton, Philadelphia and Baltimore, take rates which differ from those of New
k by fixed amounts. The class rates from Philadelphia to Chicago, for
mple, are 6 cents less per 100 lb. on each of the first two classes, and 2 cents
on each of the other four. Baltimore has a differential slightly greater than
enjoyed by Philadelphia, while Boston's class rates westbound are to
t points the same as New York's. For many years the first-class rate from
v York to Chicago was 75 cents per 100 lb., and the rate from Philadelphia
consequently 69 cents. Several percentage increases, and one decrease,
ates, between 1913 and 1923 brought the New York-Chicago first-class rate
$1.42. Had the percentage relation between New York and Philadelphia
s been preserved, the first-class rate from the latter city to Chicago would
be about $1.31. But the maintenance of the fixed differential has made the
adelphia-Chicago first-class rate $1.36.

"BASING-POINT" SYSTEM.—In other parts of the United States distance has not exercised the controlling influence upon rates that it has long exercised in Official Classification Territory. In the South the **prevalence of water competition** during the early years of railroad development brought about innumerable instances of charging higher rates for shorter distances. Commercial centers located on rivers and on the seacoast, and even important railroad centers not located on waterways, were designated as "basing-points," and given low rates, while nearby points, whether closer to or farther away from the source of traffic, received rates which were made by **adding the local rate from the basing-point to the basing-point rate.** Violation of the "long and short haul" principle of rate making was for many years the characteristic feature of the rate structure of the South. Most of the discrimination has now been eliminated by the Interstate Commerce Commission, and **only a few authorized "basing-points"** remain. If the mileage scale for Southern territory, now under the consideration of the Commission, should eventually be adopted, it will mean the virtual end of the "Southern basing-point system."

EFFECT OF WATER TRANSPORTATION ON TRANSCONTINENTAL RAILROAD RATES.—Until quite recently **westbound transcontinental rates** also showed the effect of water competition, the rail carriers being permitted to exact higher rates to intermediate points than to points situated on the Pacific Coast. When intercoastal water transportation was virtually suspended during the World War, the railroads were required to bring this discrimination to an end, and the rates to the coast were raised to an amount not less—sometimes greater—than the rates to intermountain destinations. Since the resumption of intercoastal steamship service by way of the Panama Canal the transcontinental railroads have been endeavoring to secure permission to reduce the coast rates, but so far the Commission has refused to permit any general restoration of the discriminatory charges. The commercial interests of the western intermountain territory, who have long objected to the lower rates to the coast, are the chief interests behind the movement to have Congress take away from the Interstate Commerce Commission its discretionary authority with respect to fourth section violations.

COMPLEX INFLUENCES IN RATE MAKING.—The freight rates now in existence have gone through a **long process of gradual development.** Many considerations, which were important factors in the determination of rates in the past, are now possibly of little significance, but they may still leave a distinct impress upon the various rate structures of the country. Various competitive influences, topographical conditions, and peculiarities of economic development as well as local prejudices and interests, have created different systems of rate making in different regions of the United States. That no common plan has been followed the country over is indicated by the wide differences in freight classification, in the varying commodity rates, and in the outstanding features of various territorial rate structures.

FREIGHT RATES CHANGE TO MEET CONDITIONS.—Freight rates are constantly changing. Individual rates move up and down in accordance with the conditions of industrial development, the competition of transportation agencies and of other business interests, and the attitude of regulating authorities on the questions of reasonableness and undue discrimination. Moreover, the general level of rates must vary according to changes in the general business situation, the changes in price levels, and the expenses of producing transportation service. Since 1913 there has been a substantial increase in railroad rates, just as there has been a substantial increase in the prices of commodities

e rate structure must shift and change to meet conditions, and there will ver be a time when it can be moulded by mere rule of thumb. On the other nd, experience with regulation has shown the possibility of the adoption of ew general principles of rate making. As time goes on we may expect to see development of new principles and a wider application of those already nd to be practicable.

Express Rates

SYSTEM OF EXPRESS RATES.—Express rates, like freight rates, are both ss and commodity. There are **three classes** of express traffic. The first ss includes all merchandise except food and drink and articles classified nerwise in the express classification. Second class includes articles of food d drink, while third class consists primarily of miscellaneous printed matter h as advertisements, books, printed cards and circulars. Currency, bullion d securities are covered in the "money classification."

The express class rates in effect are the outgrowth of a complete schedule of es which the Interstate Commerce Commission established in 1913. With rates prescribed at that time the Commission introduced a new and simple thod of rate publication, which is still followed. The United States is divided o numbered **"blocks"** formed by the intersecting parallels of latitude and ridians of longitude. Each block is divided into 16 lettered **"sub-blocks."** **"directory of stations"** gives the block and sub-block location of all stations. e class tariff of any station gives the class rates to all other stations. All nts in each non-adjacent block have the same rates. Rates from a station other stations in the same block and to stations in adjacent blocks are sub-ck rates. The express companies publish commodity tariffs applying to pments of foodstuffs, such as vegetables, fish, fruit, milk and cream, in tricts where the traffic in these articles is heavy.

BASIS OF EXPRESS RATES.—By permission of the Interstate Commerce mmission, the express companies make nearly all rates dependent upon the **clared value of articles transported.** Except in the case of ordinary live ck and a few other articles, the published class rates apply only when the ue of the shipment does not exceed $50, or if the shipment weighs more n 100 lbs. when the value does not exceed 50 cents a pound. If greater ues are declared by the shipper, an extra charge of 10 cents is made for each 0 or fraction thereof in excess of the values indicated.

The express companies provide a **C. O. D. service,** transporting and deliver- packages, collecting the amount due from the consignee, and remitting to shipper.

Ocean Rates and Charges [1]

TYPES OF SERVICE.—There is little similarity between ocean transporta- n services employed in foreign trade and the railroad service upon which nestic commerce depends. The ocean is a free highway to all the world. A o may start from any port and its range of movement is bounded by the ent of the sea. The business of ocean carriage is open to individuals and porations of all lands; the service is the **most flexible of all transportation vices;** and competition can never be subjected to complete control.

There are three fairly distinct types of ocean carriers—the private carrier, tramp, and the liner.

[1] See also sections on Export and Import Procedure and Traffic Management.

The Private Carrier.—The private carrier is used to transport the freight o its owner; it is the world delivery wagon of the larger producer. A few America corporations engaged in the production of steel, oil and a few other commodities have their own ships, and transport a large portion of their own export an import freight. Some of the private carriers, while used primarily to transpor the freight of their owners, also offer a common carrier service to others.

The Tramp.—The tramp is the wanderer, the peddler, ranging from port t port as opportunities for business are presented. There are thousands of tram vessels in ocean commerce. They are used chiefly for the transportation o heavy bulk cargo. Arrangements for their employment are made ordinaril through ship-brokers, middlemen found in every port of the world, whos function it is to bring together ship and shipper.

The Liner.—The liner is more nearly comparable to the railroad train. I moves over definite routes, between designated ports, on regular schedule Some liners carry freight exclusively, but there are many combination liners which transport both freight and passengers, and we have also the great expres passenger liners, which seldom carry freight at all.

OCEAN TRANSPORTATION CHARGES—CHARTER RATES.—Th rates for carriage of freight on tramp vessels are made by contract betwee shipper and carrier, the arrangements being effected directly or through broker. The contract for carriage is ordinarily termed a "charter." There ar **two general types of charters,** the trip and the time, the former being the mor numerous. **Trip charter rates** are expressed as so much per ton, or bushel, o other unit of the commodity carried, while **the time charter** usually provide for payment for the stipulated time according to the net or the dead-weigh tonnage of the vessel. Charter rates move up and down according to th volume of overseas trade and the available supply of shipping. The charge are established in the open market, and are subject to the highest degree o competition. In those ports which have a large volume of trade, charters ar an object of competitive dealing on maritime exchanges or produce exchange just as corn or wheat on grain exchanges, or securities on stock exchanges.

LINER RATES.—The rates charged by liners are usually **less competitiv than charter rates.** The steamship lines on most of the trade routes of th world organize associations or **"conferences,"** the purpose of which is to brin ocean rates under control. These conferences establish rates, allot sailing among competing lines, and occasionally arrange for the pooling of traffi The rates are flexible, however, and respond readily to commercial condition but if the conference includes all the lines operating between particular port and if it is thoroughly organized, there is no indiscriminate cutting of rates b individual lines. Rates may not be uniform over all lines, but whatever diffe entials may exist on certain lines, are permitted and sanctioned by the co ference.

Kinds of Liner Rates.—Liner rates are quoted on particular commoditi and upon "general cargo." In addition to the ordinary rates, a liner ma frequently offer **"berth" rates** for grain or other bulk cargo. Such berth rat are offered on a vessel when there is a prospect of not having a full loading f a particular sailing, and additional freight is wanted to fill up space which othe wise would be unused.

Basis of Liner Rates.—The rates for transportation on line vessels are base upon the **weight or upon the cubical content** of the cargo offered—so much p 100 lb., per cubic foot, or per ton, long, short, or measurement. A ton h

measurement is 40 cubic feet, a long ton 2,240 lb., and a short ton 2,000 lb. Very often liner rates are quoted as so much "per ton, weight or measurement, ship's option," which means that the freight subject to such a quotation will be charged for on the basis of weight in long or short tons, as indicated, or on the basis of measurement tonnage, whichever method will yield the higher revenue to the vessel.

OCEAN RATES SELDOM PUBLISHED IN TARIFFS.—Rates for ocean transportation are subject to frequent variation, and it is seldom that steamship lines publish their rates in tariffs, as railroad companies do. Even in the few cases where tariffs are issued, the rates are ordinarily made subject to change without notice.

Bibliographical Note

The best available handbook of information for shippers, dealing with transportation rates, rules, practices, and laws, affecting carriers by rail and by water, is the **Freight Traffic Red Book,** published annually by the Traffic Publishing Company, New York. **The Exporter's Encyclopaedia,** published annually by the Exporters' Encyclopaedia Company, New York, contains information relative to the technical requirements for exporting to all countries of the world.

Railroad freight tariffs and special service tariffs are secured by application to railroad freight agents or to railroad traffic departments. Subscriptions for the **Consolidated Classification** may be sent to the Consolidated Classification Committee, Chicago. For information with regard to routing of railroad shipments, the most widely used guides are the **Shipper's Guide,** published by the Shipper's Guide Company, New York, Chicago, and St. Louis, and **Bullinger's Postal and Shipper's Guide,** published by Edwin W. Bullinger, New York. Both these guides give the railroad location and shipping directions for all points in the United States, and they are regularly revised and republished. The Shipper's Guide Company also publishes a comparative table of express and parcel post rates in effect in the United States. The familiar **Official Guide of Railways and Steam Navigation Lines of the United States, Canada, etc.,** published by the National Railway Publication Company, New York, is also used extensively by shippers, though it is designed primarily for use in connection with passenger travel. Another important publication for use in connection with routing shipments of freight is the **Official Railway Equipment Register,** published monthly by the Railway Equipment and Publication Company, New York. This publication shows the junction points of all railroads in the United States and the dimensions of the cars owned by the various railroad companies.

The most recent books dealing with the economics of transportation, rate theories, principles of regulation, and transportation practices are:

Johnson and Van Metre, **Principles of Railroad Transportation;** D. Appleton & Co., New York.

Lewis H. Haney, **The Business of Railway Transportation;** The Ronald Press Co., New York.

Eliot Jones, **Principles of Railway Transportation;** The Macmillan Co., New York.

Sidney L. Miller, **Railway Transportation;** A. W. Shaw Co., Chicago.

Vanderblue and Burgess, **Railroads: Rates, Service, Management;** The Macmillan Co., New York.

Morris S. Rosenthal, **Technical Procedure in Exporting and Importing;** The McGraw-Hill Book Co., Inc., New York.

A convenient text on the law of carriers is Edgar Watkins, **Shippers and Carriers of Interstate and Intrastate Freight,** published by the Harrison Company, Atlanta. Rogers MacVeagh's **Transportation Act, 1920,** published by Henry Holt and Company, New York, is an exhaustive analysis of the Interstate Commerce Act, as revised in 1920; and Karl Knox Gartner's **Interstate Commerce Act,** published by the LaSalle Extension University, Chicago, is a convenient and exceedingly practical discussion of the present system of federal railroad regulation.

The standard reference work dealing with the financial structure and the earnings of all American railroads is **Poor's Manual of Railroads,** published annually by Poor's Publishing Company, New York.

SECTION 22

TREASURER—COMPTROLLER—SECRETARY: FUNCTIONS, ETC.

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SECTION 22

TREASURER—COMPTROLLER—SECRETARY: FUNCTIONS, ETC.

A corporation, in the words of Chief Justice Marshall, being the mere creature of law, is subject to regulations prescribed by statute. Because of this a corporation's problems of finance, and its accounting and reporting of the results of its activities, are specialized. Executives should understand the rudiments at least of the statutory requirements and should see that they are properly observed in the accounts and records. **Treasurers, comptrollers** and **secretaries** of corporations are most directly concerned with the fulfillment of the **statutory requirements imposed on corporations.** This section deals with the duties of those officers.

The Treasurer

POWERS AND DUTIES.—The treasurer is the **financial officer** of the corporation. His functions include control of corporate funds and attending to the financial details of the enterprise. The treasurer is ordinarily appointed by the board of directors[1] and is subject to their direction and that of the president. Usually the by-laws of a corporation define the powers and duties of the treasurer; if not, they may be defined by the directors. In some states the statutes require compliance with certain provisions, such as giving a bond.

The by-laws defining the treasurer's duties and powers often follow the general line indicated by the following:

> The treasurer shall have custody of and be responsible for all moneys and securities of the company; shall keep full and accurate records and accounts in books belonging to the company, showing the transactions of the company, its accounts, liabilities and financial condition, and shall see that all expenditures are duly authorized and are evidenced by proper receipt and vouchers. He shall deposit, in the name of the company, in such depository or depositories as are approved by the directors, all moneys that may come into his hands for the company's account. His books and accounts shall be open at all times during business hours to the inspection of any director of the company.
>
> The treasurer shall also endorse for collection or deposit all bills, notes, checks and other negotiable instruments of the company; shall pay out money as may be necessary in the transactions of the company, either by special or general direction of the board of directors, and on checks signed by the president and himself, and shall generally, together with the president, have supervision of the finances of the company.
>
> He shall also make full report of the financial condition of the company for the annual meeting of the stockholders, and shall make such other reports and statements as may be required of him by the board of directors or by the laws of the state.
>
> He shall give bond in the sum of $5,000 with sureties satisfactory to the board of

[1] In Massachusetts the statute provides that the treasurer shall be elected by the stockholders.

directors, for the faithful performance of his duties and for the restoration to the company in event of his death, resignation or removal from office of all books, papers, vouchers, money and other property belonging to the company that may have come into his custody. He shall receive such compensation, not exceeding $5,000 per annum, as may be fixed by the board of directors.

The above provisions make the treasurer responsible for **keeping the books** and making the **annual report of financial condition.** In corporations, except the larger it is common for the treasurer to be responsible for the accounts and the financial reports. In the **larger corporations,** however, the comptroller of accounts is not a subordinate of the treasurer and the treasurer keeps no accounts except those for cash receipts and payments. The following provision from the by-laws of the United States Steel Corporation defines the powers and duties of the treasurer:

The treasurer shall have custody of all the funds and securities of the company which may have come into his hands; when necessary or proper he shall endorse on behalf of the company, for collection, checks, notes and other belongings, and shall deposit the same to the credit of the company in such bank or banks or depository as the board of directors or the finance committee may designate; he shall sign all receipts and vouchers for payments made by the company; jointly with such other officer as may be designated by the finance committee, he shall sign all checks made by the committee and shall dispose of the same under direction of the board of directors or of the finance committee; he shall sign with the president or such other person or persons as may be designated by the board of directors or the finance committee, all bills of exchange and promissory notes of the company; he may sign, with the president or vice-president, all certificates of shares in the capital stock whenever required by the board of directors or the finance committee; he shall render a statement of his cash account; he shall enter regularly in books of the company, to be kept by him for the purpose, full and accurate account of all money received and paid by him on account of the company; he shall, at all reasonable times, exhibit his books and accounts to any directors of the company upon application at the office of the company during business hours; and he shall perform all acts incident to the position of the treasurer subject to the control of the board of directors or of the finance committee. He shall give a bond for the faithful discharge of his duties in such sum as the board of directors or the finance committee may require.

In the same by-laws provision is made for **assistant treasurers** as follows:

The board of directors or the finance committee may appoint an assistant treasurer or more than one assistant treasurer. Each assistant treasurer shall have such duties and shall perform such duties as may be assigned to him by the board of directors or by the finance committee.

The **treasurer's principal records** consist of check books or registers, cash books, bank reconciliations, security registers and note registers. All the other books of account would also be records of the treasurer when he is responsible for the duties of comptroller.

FORMALITIES IN ASSUMING OFFICE.—There are certain formalities to be followed upon the assumption of the office of treasurer. In assuming office, he is usually required to **give bond,** and this must be done in accordance with the requirements of the particular corporation before he may enter upon the duties of his office. As soon, however, as he has qualified for his position by giving a satisfactory bond and complying with any other requirements of the corporation, he is ready and entitled to take possession of his office and begin the discharge of his official duties.

The **retiring treasurer,** on the other hand, retains his position as treasurer of the corporation and has authority to perform all its usual duties until the treasurer-elect has qualified and assumed the duties of his office. Then, however, the authority of the retiring treasurer immediately terminates, he is no longer

competent to exercise any of the functions of the office, and, unless otherwise instructed by the board, must at once turn over to the new official all corporate property in his custody, including the books of account. The retiring treasurer in preparation for the surrender of his office, usually closes his books and prepares a balance sheet, giving a more or less complete statement of the general financial condition of the corporation. Also an audit of his accounts is desirable, particularly when the corporate assets are material. The audit of the retiring treasurer's books relieves the incoming treasurer from any responsibility as to their condition. He takes them as they are, but must assure himself that the corporate funds and other property turned over to him by the retiring treasurer accord with the books. If he does not, his negligence in the matter may render him liable for any resulting loss to the corporation.

The **incoming treasurer** should at once notify the depositories in which the corporate funds are held of his election and assumption of office. If the corporate funds have been **deposited in the name of the treasurer** of the corporation, it will be necessary for them to be transferred to the treasurer-elect by check of the retiring official. If, however, the funds are **deposited in the corporate name,** no such transfer is necessary. There is then no change in their ownership but merely a change in the officer by whom checks are drawn, and proper certification to the bank of this change is all that is required. Should the outgoing treasurer refuse to turn over to the treasurer-elect any property which belongs to the corporation, the directors, or even the treasurer himself, may bring suit for its recovery. As a matter of course, the treasurer should give his predecessor a receipt for the corporate property turned over.

When the treasurer relinquishes, or is ousted from, his position, all properties of the company in his possession, including the books of account, should be surrendered to his successor or to such other party as may be designated by the board of directors. The incoming treasurer is the usual and proper party to whom such property is delivered. The retiring treasurer should be given **receipts for all properties** turned over.

The corporate accounts are always the property of the corporation. Sometimes in the smaller corporations the books in which these accounts are kept have been purchased by the treasurer personally and the question as to their ownership then arises. As a matter of law the treasurer must surrender the books in which the accounts are kept, even though these books have been purchased with his personal funds. He is entitled in such case to payment for the books, but he cannot withhold them as a means of enforcing this payment or on the plea that they are his. In order to prevent any complications on this score, it is sometimes provided in the by-laws that the accounts of the company shall be kept only in books that are the property of the corporation.

RELATION TO STOCKHOLDERS, DIRECTORS, ETC.—The treasurer must obey the instructions of the stockholders, but this is the limit of their usual authority over him as an agent of the corporation. In actual practice the treasurer has **no direct relation with stockholders** other than to pay dividends to them on authorization from the board of directors.

While the **board of directors** usually elects the treasurer to his office and has authority over him, the board may hold the president responsible for the proper and successful administration of all departments, including the financial.

The treasurer reports to **the finance committee,** if there be one. The finance committee has general and special charge and control of all financial affairs of the company and has and exercises all of the powers of the board of directors in such financial matters when the latter is not in session. The committee fixes all salaries and compensation paid to officers of the company except as

otherwise provided in the by-laws or when fixed by resolution of the board of directors.

The relation between the treasurer and **comptroller** varies in different corporations. Theoretically, the best form of organization is had when they are independent of any authority, of the one over the other, as then the accounts are a check on the funds.

The comptroller audits and approves the vouchers which the treasurer pays, and keeps controlling accounts of all moneys which the treasurer receives. These functions are naturally united in one office in organizations save the largest.

The treasurer's relation to the president is that of a subordinate to a superior officer. The **president** is primarily responsible for the execution of the policies of the board of directors. In financial matters the treasurer takes the direction of the president or the finance committee, subject only to the by-laws.

Treasurer's Duties as to Dividends

DECLARATION OF DIVIDENDS.—The **power to declare dividends** rests solely with the board of directors. In exercising this power directors are subject to personal liability if the rights of creditors are infringed or if the provisions of bond indentures or preferred stock provisions are violated. Dividends are declared at duly called meetings of the board of directors. A formal resolution is voted upon to fix the amount of dividend and the date payable. The amount may be expressed as a percentage upon the par value of the stock or stated as a fixed amount on each share. It is usually payable to stockholders of record as of a future date, at a still later date. Dividends must not be declared payable to stockholders of record as of a past date.

RESOLUTIONS DECLARING DIVIDENDS.—The following are **typical resolutions** for declaring dividends on various kinds of stock:

Directors' Resolution Declaring Dividend—Common Stock

Resolved, that the sum of ten thousand dollars ($10,000.00) be and hereby is appropriated and set aside from the surplus profits of this company for the payment of the regular two per cent (2%) quarterly dividend upon its outstanding stock, said dividend to be due and payable on the 20th day of May 1925 to stockholders of record as shown by the books of the company at the close of business on the 15th day of May 1925.

Resolved Further, that the treasurer of this company be hereby authorized or instructed to give notice of such dividend and to pay the same when due.

Directors' Resolution Declaring Dividend—Preferred Stock

Resolved, that the semi-annual dividend of three per cent (3%) upon the outstanding preferred stock of the company be and hereby is declared from surplus profits, said dividend to be paid on the 10th day of March 1925 and to be payable to stockholders who appear of record on the first day of March 1925 at 3 P. M., and that the treasurer of this company be hereby instructed and fully authorized to give due notice of such dividend and to pay the same on the date set forth.

Directors' Resolution Declaring Dividend—Preferred and Common Stock

Whereas, the surplus profits of this company now exceed the sum of ten thousand dollars ($10,000.00) required by the by-laws of this company to be in reserve before dividends may be paid upon either the preferred or common stock of this company, and such excess is now available for payment of dividends:

Therefore, Be It Resolved, that a dividend of five per cent (5%) be and hereby is declared upon the outstanding preferred stock of this company, and a dividend of three per cent (3%) on the outstanding common stock of this company, said divi-

dends to be payable from said excess surplus profits of the company on the 5th day of March 1925 to stockholders appearing of record at 3 P. M., on this 15th day of February 1925 and that the treasurer of this company be hereby fully authorized and instructed to give proper notice of said dividends and pay the same when due, and to take all other necessary steps to carry out the intent of the present resolution.

REGULATIONS GOVERNING PAYMENT OF DIVIDENDS.—Cook on "Corporations" states:

> It is the well determined doctrine of the courts of this country that the capital stock is a fund to be preserved for the benefit of the corporate creditors. Hence the rule has been firmly established that where dividends are paid in whole or in part out of the capital stock, corporate creditors being such when the dividend was declared or becoming such at a subsequent time, may to the extent of their claim, if such claims are not otherwise paid, compel the shareholders to whom the dividend has been paid to refund whatever portion of the dividend was taken out of the capital stock.

The declaration of an **illegal dividend** or the payment of an illegal dividend already declared may be enjoined and stopped by proper action of the stockholders. Illegal dividends may be:

1. Those declared in disregard of the rights of some of the stockholders.
2. Those declared in violation of charter or by-law provisions of the particular corporation.
3. Those which either impair the capital stock or threaten the solvency of the corporation.

1. Dividends which are **unequal among stockholders** of the same class are absolutely in disregard of the rights of the stockholders discriminated against—so much so that cases directly involving the principle but seldom arise. When any inequalities are attempted it is usually by means of diversion of the profits, such as payments of excessive salaries or unnecessary expenditures. Another instance of dividends in disregard of the rights of stockholders is sometimes found when the directors declare dividends on common stock while cumulative dividends due on preferred stock have not been paid. In such a case the court will compel a readjustment of the dividends.

2. Dividends declared **in violation of charter or by-law provisions** may be perfectly proper in themselves but illegal merely because of their prohibition. Thus, the charter or by-laws may provide that no dividends shall be declared until after surplus funds have been accumulated to some specified amount. If dividends are declared before this surplus has been received, they are illegal and payment may be enjoined by proper action of the stockholders.

3. The **most common form of illegal dividends** is that which **impairs the capital stock** or which **endangers the solvency of the corporation.** In a case of this kind it is to some extent a matter of bookkeeping and judgment as to whether a dividend is such as to impair the capital stock or render the company insolvent. If the directors declare a dividend in good faith after a proper investigation of the financial condition of the company, the courts are not likely to interfere.

A case of illegal dividends comes within the **jurisdiction of courts of equity,** and any stockholder may bring suit therein to enjoin the declaration of a dividend believed by him to be illegal. An illegal dividend may be rescinded by the directors at any time before its payment.

The treasurer or comptroller through the president furnishes the directors with statements of the corporation's financial position and earnings, upon which the directors base their decisions in declaring dividends. These statements should be accurate and in no respect misleading; otherwise the directors

may declare an improper dividend. The treasurer is responsible for making the **proper distribution of dividends** in accordance with the vote of the directors.

As a rule, however, the treasurer is not personally liable in any way for the payment of dividends ordered by the directors unless he knows such dividends to be absolutely fraudulent. In a few states, however, liability for dividends prohibited by statute has been extended by express enactment to the executive officers of the corporation if they consent or concur therein. In such states, if the treasurer, knowing the dividends to be in violation of the statutory provisions, nevertheless obeys the instructions of the directors and either pays such dividends or permits them to be paid, he is liable with the directors.

A dividend illegally declared and paid by the corporation cannot be recovered from stockholders who have received it in good faith unless the deficit thereby created is greater than the outstanding stock. In this case the corporation is insolvent in that its actual liabilities exceed its assets and the rights of its creditors are affected.[2]

DIVIDEND NOTICES.—It is the duty of the treasurer to notify stockholders when dividends have been declared by the board of directors. In the **smaller corporation** he usually sends the notices by mail to each stockholder. The following is a **typical form** of the notice for mailing:

NEW YORK MILLING COMPANY
NEW YORK

December 1, 1924

DEAR SIR:

You are hereby notified that the directors of the New York Milling Company have this day declared the regular semi-annual dividend of three per cent (3%) on the capital stock of the company, payable January 15, 1925, to stockholders who appear of record at the close of business January 10, 1925.

JOHN DOE,
Treasurer

In the **larger companies** where there are many stockholders, the task of mailing a notice to each individual stockholder may be saved by a **notice in the newspapers.** The typical form of such notice is as follows:

X. Y. Z. COMPANY, INC.
42 BROADWAY, N. Y. C.

September 15, 1925

A quarterly dividend of one and three-quarters (1¾%) per cent has been declared upon the preferred stock of the X. Y. Z. Company, Inc., payable October 1, 1925 to stockholders of record at the close of business September 20, 1925.

JOHN DOE,
Treasurer

If the **transfer books** are closed preparatory to payment of dividends, the **dates of closing and re-opening** should appear as in the following notice which may be either for publication or for mailing:

WILLIAMS FOUNDRIES COMPANY

NEW YORK, February 1, 1925

DIVIDEND NO. 25

The directors of the Williams Foundries Company have this day declared a quarterly dividend of one and one-half (1½%) per cent on the capital stock of the company, payable March 1, 1925 to stockholders of record at the close of business February 10, 1925.

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[2] The rule given is the ruling of the United States Supreme Court (*McDonald* v. *Williams*, 174 U. S. 397; see also *Hayden* v. *Williams* 96 Fed. 279) and of some of the states (*Cottrell* v. *Albany, etc., Co.*, 142 N. Y. App. Div. 148).

Transfer books will close February 10, 1925 and re-open February 20, 1925. Checks will e mailed.

RICHARD ROE,
Treasurer

The following is a rather **informal notice** but is sufficient to meet all requirements:

THE CONSOLIDATED EXCHANGE BANK
NEW YORK

At a regular meeting of the board of directors of The Consolidated Exchange Bank eld January 11, 1925 a quarterly dividend of $5.00 per share was declared, payable February 1, 1925, to stockholders of record at the close of business January 31, 1925.

EDWARD S. ROE,
Cashier

This notice is signed by the cashier, because in a bank he performs the treasrer's functions.

The following is another **typical dividend notice of the common stock** of a orporation:

OFFICE OF
ANGLO-AMERICAN DREDGING COMPANY
No. 42 Broadway, NEW YORK CITY
April 4, 1925

QUARTERLY COMMON STOCK DIVIDEND
No. 23

The directors of the Anglo-American Dredging Company have this day declared a dividend of two per cent (2%) on the common capital stock of the company, payable May 15, 925 to stockholders of record April 28, 1925. The books of the company for the transfer common stock will be closed at 3 P. M. April 28, 1925 and will be re-opened May 2, 1925.

JOHN DOE,
Treasurer

The following publication notice covers the **dividend on both common and referred stock.** This inclusion is not in any way objectionable, but at times, r the sake of greater emphasis and publicity, a separate notice for each vidend is preferred.

AMERICAN RADIO COMPANY

PREFERRED DIVIDEND

COMMON DIVIDEND

A dividend of one and three-quarters (1¾%) per cent, being the 92nd consecutive quarrly dividend, has been declared on the preferred stock, payable February 15, 1925, to ockholders of record at close of business February 1, 1925.

A dividend of $1.00 per share, being the 3rd consecutive quarterly dividend, has been clared on the common stock, payable March 31, 1925, to stockholders of record at close of siness March 15, 1925.

The transfer books will not close.

JOHN DOE,
Treasurer

When notice of dividends is by publication alone, an **explanatory statement** usually enclosed with the dividend check by the treasurer. Announcement this nature used by some of the larger corporations is given in the following rm:

WILLIAMS FOUNDRIES COMPANY

NEW YORK, March 1, 1925

On February 1, 1925 the directors declared quarterly dividend No. 25 of one and one-half (1½%) per cent upon the preferred stock of the company, payable this day to stockholders of record of February 10, 1925.

In accordance with permanent order on file, enclosed find check for above dividend of the preferred stock standing in your name. No acknowledgment is necessary.

Kindly advise John J. Jones, assistant secretary, No. 42 Broadway, New York, of any change in your address, giving your old address as well as the new.

RICHARD ROE,
Treasurer

(Dividend check enclosed which please cash immediately)

KINDS OF DIVIDENDS.—Dividends are usually paid in cash. When paid in any other form, the form should be specifically stated in the vote of the directors. In whatever form the dividend is to be paid, it is the treasurer's duty to pay the dividend exactly as specified by the board of directors. Forms of distributing dividends other than in cash are issue of the corporation's own stock as stock dividends so-called, issue of corporate bonds, issue of scrip (notes of the corporation to pay at a future date), or distribution of securities in the treasury or other property.

Cash Dividends.—It is the treasurer's responsibility before mailing the dividend checks to be sure that the dividend has been legally declared. When he has assured himself of this fact, he will obtain a list of the stockholders of record on the date specified by the vote of the board of directors and prepare and mail checks according to the holdings of each stockholder. In the **larger corporations** the services of a trust company or bank as a **transfer agent** may be availed of, in which case the treasurer of the company will mail a check for the full amount of the dividend to the transfer agent who will be responsible for distribution of correct checks to individual stockholders.

Stock Dividends.—In conjunction with the secretary of the company, it is the duty of the treasurer to see that the increased amount of stock which will be outstanding after the distribution of a stock dividend is fully authorized and that the stock is distributed to the stockholders in accordance with the vote of the directors.

Scrip Dividends.—Scrip dividends avoid the immediate distribution of the current working capital of the corporation. Scrip is a note of the corporation promising to pay a certain sum of money at a future date. The effect of issuing scrip dividends is to increase the indebtedness of the corporation by the amount of the dividend. The **date of payment** on scrip dividends may be stated, or it may be made contingent, as for instance, "when a company accumulates sufficient funds for the purpose," or "when property against which the scrip is issued shall be sold." It also may be paid "at the pleasure of the company."

Scrip is issued in **many different forms.** Sometimes the certificates are convertible, being exchangeable at a certain time for stocks or bonds of the company on demand of the holder. At times scrip certificates entitle the holder to dividends. The scrip then partakes much of the nature of stock save that it has no voting power. Scrip certificates, though issued as a dividend and in lieu of certain property in possession of the corporation, do not fix the ownership of that property in the holdership of certificates. They do give the holder a claim against the corporation—not the absolute claim which the ordi-

narily declared dividend gives, but a conditional claim dependent upon the terms of the scrip certificate.

It is usually the treasurer's duty in connection with the distribution of scrip dividends to prepare a form of note on the face of which are the terms of the dividend as voted by the board and submit it to the board for its approval. Upon obtaining such approval it is his responsibility to see that each stockholder obtains his proper portion of the scrip dividend as declared.

Property Dividends.—Securities of other corporations acquired by purchase or received from the sale of property are sometimes distributed to stockholders as dividends Such dividends may purport to be distributions of profits, or they may be liquidating dividends. The former are limited to the amount of surplus. In voting the dividend the board of directors will specify the securities or property to be distributed and it is the treasurer's duty to make the distribution exactly in accordance with the vote.

DIVIDENDS ON PREFERRED STOCK.—Dividends on preferred stock, like dividends on common stock, are not payable unless declared. Notwithstanding that the quarterly or semi-annual dates for payment of dividends may be specified in the preferred stock provisions, the treasurer should make no distribution to stockholders until the dividend shall have been formally declared by the directors.

PREPARATION OF DIVIDEND CHECKS.—The transfer books of a corporation are usually closed a number of days before a dividend is paid in order to leave ample time for preparation of the statement of amounts to be paid to individual stockholders. When the transfer books are closed, the secretary of the company, if no transfer agent is employed, will furnish the treasurer with a **list of stockholders of record** as they appear on the date of closing. From this list the treasurer will make out the dividend checks. The checks are customarily mailed to stockholders. The larger corporations usually send out **special checks** in payment of dividends with some identifying words printed thereon, as "Dividend Check" or "Dividend No. . . . . " The checks are often accompanied by notices to the effect that they are in payment of specified dividends. Where checks are mailed, no formal receipt is required, as the endorsement on the check is sufficient acknowledgment.

DIVIDEND MAIL ORDER.—Some companies require that an order be filed by the stockholder before the dividend check will be mailed. Otherwise the money will be held to the stockholder's order at some stated location. The following is a dividend notice of that kind:

AMERICAN NAVIGATION COMPANY

DIVIDEND No. 95

A quarterly dividend of one dollar and fifty cents ($1.50) per share on the capital stock of this company has been declared payable at the treasurer's office, No. 65 Broadway, New York, N. Y., on July 2, 1925, to the stockholders of record at 3 P. M., on Thursday, May 31, 1925. The stock transfer books will not be closed for the payment of this dividend. Checks will be mailed only to stockholders who have filed permanent dividend orders.

A. K. JONES,
Treasurer

May 10, 1925

The **mailing order** referred to in the foregoing dividend notice is shown below:

NO CHECK MAILED WITHOUT AN ORDER

To the TREASURER OF AMERICAN NAVIGATION COMPANY,
65 Broadway, New York, N. Y.

Until this order shall be revoked in writing, please send by mail in check payable to the order of

Address .....
in .....
Full .....

all dividends now due, or which may hereafter become due, on all stock now standing or which may hereafter stand, on the books of your company in ..... name..

(Sign here.....
(Date) exactly as.....
name ap-.....
..... pears on .....
stock) .....

When payment is to be mailed to other than stockholder, signature of the latter MUST be acknowledged before a notary public on the back of this order and if signed by an attorney, administrator, executor, guardian or trustee, it MUST be accompanied by satisfactory evidence of the signer's authority.

On the back of the above mailing notice should appear a form for the notarial acknowledgment.

DIVIDEND BOOK.—Fig. 1 gives a suggested form of the record which the treasurer uses in connection with dividend **checks handed to stockholders at the company's office.**

X. Y. Z. MANUFACTURING COMPANY

Semi-annual Dividend No. 24 ..... 192.. 4%

Name of Stockholder	Address	Number of Shares	Amount of Dividend	We Hereby Acknowledge Receipt of the Accompanying Dividend
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....

FIG. 1. Form of Record for Dividend Checks Delivered at Company's Office

Fig. 2 gives a typical record of the dividend payment to stockholders as kept by the treasurer when payment is made by **check sent by mail.**

SPECIAL BANK ACCOUNT AND PAYMENT THROUGH FISCAL AGENT.—When a dividend is authorized, the usual entry on the books of account is a debit to surplus and credit to dividend payable account. This records the liability to stockholders. A good practice is to draw a single check for the total amount of the dividend for deposit to the credit of a **special bank account,** such as "Blank Company Dividend Account." The checks to the individual stockholders are then drawn on that account.

Many corporations employ banks or trust companies to act as their **fiscal agents** in the payment of dividends. The fiscal agent maintains the stock ledgers and transfer records. After a dividend is declared, the fiscal agent

THE AMERICAN MILLING COMPANY
Cap tal Outstanding $400,000

DIVIDEND No. 24 SHEET No. 48

List of stockholders of this company as shown by the transfer books at the closing thereof at six o'clock P. M., February 15, 1925, and to whom the dividend of ten per cent, declared February 12, 1925, is payable on March 1, 1925.

SHARES OUTSTANDING 40,000 RATE OF DIVIDEND 10%

Name of Stockholder	To Whose Order Check Should be Drawn if Different from That of Stockholder	Mailing Address	Number of Shares	Amount of Dividend Paid	No. of Check Issued in Payment
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

FIG. 2. Form of Record for Dividend Checks Sent by Mail

prepares and mails the dividend checks to the stockholders of record as of a certain date. The fees for this work are usually based on the number of checks issued.

Treasurer's Duties as to Bond Issues and Interest Payments

FORMALITIES OF BOND ISSUES.—The treasurer has duties in connection with issues of bonds, the payment of interest thereon and the provision for sinking fund instalments. The **formalities of a bond issue** are usually regulated by the statutes of the particular state in which the corporation is organized. Thus in New York an issue of bonds requires (1) a stockholders' resolution or written consent; (2) a certificate of the corporate officials that the stockholders' consent has been given; and (3) a directors' resolution reciting the facts, authorizing the officers to proceed in the matter and providing for the details of the transaction. The matter is one to be undertaken only by a skilled lawyer. In some states the mere **resolution of the board of directors** is sufficient to authorize a bond issue. In a large number of states the assent of a large majority of the stockholders is a requisite. As a matter of prudence and good business, **a proper stockholders' authorization** is always desirable regardless of the statutory requirements existing in the particular state.

The more important instruments involved in an issue of corporate bonds are the bond itself, which is comparatively simple in form, and the mortgage or deed of trust, which is lengthy and complex. The **corporate bond** in its usual form is a promissory note, differing from the ordinary corporate note only in its formality, its more complete statement of the conditions under which it is issued, its formal execution, and in its being one of a series of like obligations equally secured by the same collateral or, if unsecured, of the same rate. There is practically no difference as to form between a bond and the short-term note so frequently issued by corporations of the present day, save as to length of time for which the obligation runs. A short-term note, as its name indicates, is usually given for a short period—1 to 5 years—while the bond usually extends over a much longer period, ranging from 5 to 100 years or more.

INTEREST ON BONDS.—The interest is usually represented and provided for by means of coupons, which are in effect also promissory notes, payable to bearer, which call for the payment of one instalment of interest on the bonds. This interest when due is payable only on surrender of the proper coupon, and in the absence of some good reason otherwise, such as notice that the particular coupon has been stolen, is payable to anyone who presents the coupon. The interest is usually payable semi-annually and each of the coupons of a coupon bond calls for the exact amount of one of the semi-annual interest payments on that bond. Thus, a bond running ten years with interest payable semi-annually, will have attached to it twenty coupons. Each coupon bears the same number as its bond for purposes of general identification, but also has a serial number and date, or some other specific statement indicating the order in which it becomes due and the particular interest payment for which it calls.

FORMS OF BONDS.—**Coupon bonds** are usually made payable to bearer, and ownership passes by delivery. When it is desired that bonds shall not pass by mere delivery, they are **registered,** i.e., issued in the name of some particular person as is a certificate of stock, the bond thereafter transferable only on the books of the company. Coupon bonds are sometimes registered as to principal, but the coupons are still made payable to bearer. The interest then is paid to anyone who presents the coupon, but the principal when due is paid only to the person in whose name the bond stands on the books of the company. **Bonds without coupons** are always registered, and are transferred only by assignment; interest is payable to the registered owner alone, and is usually paid by check sent out to these registered owners. Coupon bonds payable to bearer and registered bonds without coupons are often issued under the same deed of trust. Usually when this is done, the two classes of bonds are made interchangeable, i.e., the holder of a coupon bond may at any time exchange it for a registered bond, or vice versa. The advantage of the unregistered bond is found in the readiness with which it may be transferred. The advantage of a registered bond lies in the difficulty of its negotiation in case the bond is lost or stolen.

The following **form** is that **of a coupon bond,** the ownership passing by mere delivery. It may, however, be registered at the option of the owner, though this registration does not affect the coupon. These pass by delivery alone and are payable to bearer regardless of whether the bond be registered or transferable by delivery.

UNITED STATES OF AMERICA
STATE OF NEW YORK

No. 375 $500.00

MAXWELL COMPRESSOR COMPANY

FIRST MORTGAGE SEVEN PER CENT GOLD BONDS

KNOW ALL MEN BY THESE PRESENTS, That the Maxwell Compressor Company, a corporation organized under the laws of the State of New York, for value received, hereby promises to pay to the bearer hereof, or if this bond is registered, to the registered holder thereof, at the office of the Securities Trust Company of the City of New York, on the first day of December, nineteen hundred and fifty-one, in gold coin of the United States of America, of the present standard of weight and fineness, or its equivalent, the sum of Five Hundred Dollars, without deduction from either such principal or interest for or on account of any United States, State, municipal, or other tax or taxes which the Maxwell Compressor Company, its successors or assigns, may be required to pay or deduct therefrom, and the Maxwell Compressor Company hereby covenants and agrees to pay all such tax or taxes, and in the meantime to pay interest upon the said sum of Five Hundred Dollars from and after the first day of December, nineteen hundred and twenty-

one, at the rate of Seven Per Cent per annum, payable in like gold coin, or its equivalent, at the same place, semiannually, on the first days of June and December in each year, beginning with the first day of June, 1922, on presentation and surrender of the coupons hereto attached as each of them becomes due.

This bond is one of a series of One Thousand (1,000) bonds of the same tenor and date, aggregating Five Hundred Thousand Dollars ($500,000), numbered consecutively from one to one thousand, both inclusive, for the sum of Five Hundred Dollars ($500) each, all of which bonds are secured equally by a deed of trust, which is a first mortgage upon the properties of the Maxwell Compressor Company, executed and delivered by the said Maxwell Compressor Company to the said Securities Trust Company, as Trustee, granting and conveying in trust and mortgaging as security for the payment of the principal of said bonds at maturity, at par, and the interest on said bonds, payable semi-annually at the rate aforesaid, all the real estate and other property of the said Maxwell Compressor Company mentioned and described in said deed of trust, with full power to use and sell the same in the event of default in payment of the bonds or coupons, or any of them, and apply the proceeds to the payment of same as in said deed of trust provided. This bond is issued, received, and held subject to all and singular the terms and conditions contained in the deed of trust aforesaid.

This bond is further secured by a sinking fund, which shall consist of and be maintained by the payment to the said Securities Trust Company by the Maxwell Compressor Company on the first day of December, 1926, and on each succeeding first day of December thereafter, until the redemption of all the bonds issued under said deed of trust, of Twenty-Five Dollars for each Thousand Dollars of bonds then issued and outstanding, such moneys so paid to be used in the purchase of outstanding bonds at the lowest price at which they may be had, not exceeding, however, One Hundred and Ten Per Centum of the face of said bonds plus accrued interest, and if bonds cannot be so purchased, such moneys shall be used in the redemption of the bonds outstanding, as hereinafter provided.

This bond shall not become obligatory until the certificate indorsed hereon shall be signed by the Trustee, and when so authenticated by the signature of the trustee, the title to said bond shall pass by delivery, unless said bond is registered, and, if registered, the title thereto shall pass only by transfer on the books of said Trust Company, and no transfer except upon said books shall be valid unless the last transfer shall have been to bearer, which shall restore transferability by delivery.

This bond is redeemable, at the option of the Maxwell Compressor Company, on any interest day at any time after the first day of December, 1926, at One Hundred and Ten Per Cent of its face value, plus accrued interest, provided that thirty days' notice of such redemption shall be given the holder thereof by notice published once a week for four consecutive weeks prior to such redemption, in a newspaper published in New York City.

In Witness Whereof, the said Maxwell Compressor Company hath caused these presents to be signed by its President, and its corporate seal, duly attested by its Secretary, to be hereunto affixed, and hath hereunto affixed coupons with the name of its Treasurer engraved thereon, and hath caused this bond to be dated the first day of December, A. D., one thousand, nine hundred and twenty-one.

{CORPORATE SEAL}

MAXWELL COMPRESSOR COMPANY,
By Howard M. Maxwell,
President

Attest:
Frank Paulson,
Secretary.

The coupon form which follows is as it appears attached to the preceding bond.

No. 1 $17.50

MAXWELL COMPRESSOR COMPANY

will pay to the bearer at the office of the Securities Trust Company of the City of New York the sum of Seventeen Dollars and Fifty Cents ($17.50), in United States Gold Coin, or its equivalent, on the first day of June, 1922, being six months' interest on its First Mortgage Seven Per Cent Gold Bond No. 375.

William H. Powers,
Treasurer

CLASS *Registered 1st Mortgage 1930*

	NO.	DATE OF BOND		TO WHOM ISSUED		TRANSFERRED		AMOUNT
				NAME	ADDRESS	NAME	ADDRESS	
1	4000	1923 July	1	James Morse	468 West 87th St. New York City			$1,000.00
2	~~4001~~		~~1~~	~~J.B. Jackson~~	~~Brookline, Mass.~~	Wm. R. Gilbert	Brookline, Mass.	~~1,000.00~~
3	4002	Oct.	15	Henry R. Dale	Garrison, N.Y.			500.00
4	4003	1924 Feb.	12	L.D. Hurst	500 Boyston St. Boston, Mass			250.00
5	4004	Mch.	20	Ralph R. Gray	574 Park Ave. New York City			1,000.00
6	4167	1925 Jan.	1	Wm. R. Gilbert	Brookline, Mass.			1,000.00
7								
8								
9								
10								
32								
33								
34								

FIG. 3. Bond Register (*Left-hand page*)

INTEREST PAYABLE *January 1st & July 1st*

INTEREST DATE		1924 JAN.	1924 JULY	1925 JAN.	1925 JULY	1926 JAN.	1926 JULY	1927 JAN.	1927 JULY	1932 JAN.	1932 JULY	1933 JAN.	1933 JULY	REMARKS	
1923 July	1	30 –	30 –	30 –	30 –										1
"	1	30 –	30 –	30 –	(See No. 4167)										2
Nov.	1	5 –	15 –	15 –	15 –									Rec'd Int. 7/1/23 to 11/1/23 $10.00	3
1924 Mch.	1	–	5 –	7 50	7 50									1/1/24 to 3/1/24 $2.50	4
"	1	–	20 –	30 –	30 –									1/1/24 to 3/1/24 $10.00	5
1925 Jan.	1	–	–	–	30 –									Trans. from #4001	6
															7
															8
															9
															10
															32
															33
															34

FIG. 3. (*Right-hand page*)

The following is a **trustee's certificate** as it appears upon a bond.

The Securities Trust Company of the City of New York hereby certifies that the within Bond is one of the series of Bonds described in the Deed of Trust therein mentioned.

SECURITIES TRUST COMPANY OF THE CITY OF NEW YORK,
Trustee
By MALCOLM MCDONALD,
President

New York City,
January 5, 1922

The **debenture bond** is merely an unsecured promise of a corporation to pay. The following is a very simple form of such bond. The bond calls for payment in gold and is also redeemable on any interest date before maturity at the option of the company.

NUMBER 20 $500

ENGEL CHEMICAL CORPORATION

EIGHT PER CENT GOLD BOND

The Engel Chemical Corporation, a corporation duly incorporated and existing under and by virtue of the laws of the State of New York, doing business in the City of New York, doth hereby promise and agree to pay to the bearer the sum of Five Hundred Dollars ($500) in gold coin of the United States of America of the present standard of weight and fineness, at the office of the Company on the sixth day of October, 1924, with interest thereon from the sixth day of October, 1921, at the rate of eight per cent (8%) per annum, without any deduction from principal or interest for any tax or taxes which the Company may be required to pay or to retain therefrom by reason of any present or future laws of the United States or of the State of New York, as well as the normal income tax which the Company may be required to pay under any present or future law of the United States or the State of New York, the said Company hereby promising and agreeing to assume and to pay all such taxes.

This bond is one of a series of twenty bonds each in the sum of Five Hundred Dollars numbered from (1) to (20) both inclusive and (200) bonds each in the sum of $100 numbered from (21) to (221) both inclusive and all of like date, tenor and effect, and is subject and subordinate to payment of the Company's business creditors and is issued subject to the conditions set forth in a resolution of the Board of Directors of the Company, authorizing the issuance hereof.

This bond is redeemable on the sixth day of October in any year before maturity at the option of the said Company at par for each $100 of the face value of each bond, and all the accrued interest thereon in accordance with the conditions mentioned in said resolution.

This bond shall pass by delivery or by transfer on the books of the Company.

IN WITNESS WHEREOF, said Engel Chemical Corporation has caused these presents to be signed by its President, and sealed with its common or corporate seal duly attested by its Secretary pursuant to a resolution of its duly authorized Board of Directors, this sixth day of October, 1921.

ENGEL CHEMICAL CORPORATION,
By HENRY W. ENGEL,
President

{CORPORATE SEAL}

Attest:
FRANK W. HENDERSON,
Secretary

BOND REGISTER.—The treasurer may be the one to **negotiate the sale of the bonds** or this may be done by the president, or the finance committee. The public offering of securities is stringently regulated by so-called "blue sky laws."

It is a function of the treasurer to keep a bond register for registered bonds. The register shows the number of each bond, date issued, name of each bondholder, due dates and amounts of interest payments for each bond. A typical form of bond register is shown in Fig. 3 above. In the case of coupon bonds, the

treasurer keeps a **coupon register** to show for each bond the coupons paid at successive interest dates. The treasurer should keep a **card index of holders of registered bonds.** A typical form of index is shown in Fig. 4. The treasurer is responsible for the prompt **payment of interest on bonds.** One check for the total, payable to the bank that honors the coupons deposited for collection, will suffice for coupon bonds. Registered bonds require the treasurer to draw individual checks unless a fiscal agent is employed for that purpose.

METHODS OF BOND REDEMPTION.—Redemption means the act of a corporation in exchanging cash or other value for its own securities. The redemption of bonds may take place, (1) when the bonds mature in accordance with the contract covering the issue; (2) at the option of the obligor corporation at some time before maturity when such action is permitted by the contract; (3) prior to maturity and not under the terms of the contract but as a result of a subsequent agreement effected with the bondholders. A **sinking fund,** as it is

BOND NO. E455	AMOUNT $1000 00/100 NAME Hayden, John R.	CLASS Reg. Deb. Co. 1926
BONDHOLDER'S ADDRESS		TRANSFERRED TO
Post Office New York City		Name
County New York	State	Address
Street and No. 269 West End ave.		
Transferred From William Scott		

Fig. 4. Index to Bondholders

ordinarily understood, is a fund created from earnings for the purpose of reducing or retiring bonded indebtedness. The sinking fund payments must be set aside at periodic intervals and invested in accordance with the terms of the deed of trust. Most sinking funds are invested in the bonds of the issue which they protect, and this plan is to be commended, because fixed interest charges are thereby reduced. Furthermore, there is no risk of loss as with outside securities. To be redeemed before maturity the bonds are obtained either by **purchase** in the market, by **drawing certain bond numbers** by lot at the then current redemption price, or by **advertising for the desired number of bonds** at a stated price.

Treasurer's Receipt Forms

TREASURER'S RECEIPT FOR SUBSCRIPTION.—The treasurer's receipt for subscription to stock is sufficient if in the form shown in Fig. 5.

Stock scrip is sometimes employed when subscription payments are made in instalments. The face of the scrip (see Fig. 6) evidences the first instalment, and subsequent instalments are either endorsed on the back of the scrip, or

TREASURER'S RECEIPT

No. 60 20 SHARES

X. Y. Z. COMPANY
120 Broadway
New York City

$2,000.00

This is to certify that Henry Beers has paid into the treasury of the X. Y. Z. Company the sum of Two Thousand Dollars, payment in full of his subscription for Twenty Shares of its Capital Stock, duly executed Certificates for which will, upon surrender of this Receipt, be issued to his order so soon as said Certificates are ready for delivery.

December 15, 1924 C. B. FAY
Treasurer

FIG. 5. Form of Receipt for Subscription of Stock

evidenced by separate receipts. When the **indorsement plan** is followed, the stub should also have rulings to permit the entry of payments and their date, so that both the scrip and its stub will show a complete record of the transaction.

No. 62

Shares, 25
Payment: $1,250.

Name,
Henry Beers

Date,
Dec. 15, 1924

No. 62 25 SHARES
$1,250.00

INSTALMENT CERTIFICATE
X. Y. Z. COMPANY
120 Broadway
New York City

THIS IS TO CERTIFY, that Henry Beers, a subscriber for Twenty-five Shares of the Capital Stock of the X. Y. Z. Company of New York City, at its par value of One Hundred Dollars per share, has this day paid into the treasury of the Company on account of said subscription and in accordance with its terms, the sum of Twelve Hundred and Fifty Dollars.

Upon payment of the remaining instalments of said subscription in accordance with the terms thereof, and surrender of this Certificate, duly executed Certificates for said Twenty-five Shares of stock will be issued to the order of the said subscriber.

Witness our official signatures this 15th day of December, 1924.

C. B. FAY, Treasurer G. F. POND, President

FIG. 6. Form of Stock Scrip Evidencing Partial Payments of Stock Subscription

The following form of mailing notice is suitable when a subscription instalment is called by the board of directors:

JOHN DOE DESK COMPANY
1000 Main St., New York, N. Y.

INSTALMENT NOTICE

Mr. Frank Lewis,
Detroit, Mich.
Dear Sir:

You are hereby notified that by due resolution of the Board of Directors, an instalment of Ten Per Cent on subscriptions to the stock of this Company has been called for, the amount thereof to be paid to the Treasurer of the Company on or before the 15th of January, 1925.

James P. Quinn,
Treasurer

New York, N. Y.
January 3, 1922

Shares subscribed, 25.
Amount of assessment, $250.

Draw checks payable to Treasurer.

When instalments are paid after incorporation, a **treasurer's receipt** may be given for each payment (see Fig. 7). This receipt should also have its stub upon which the important items are entered.

Treasurer's Receipt
Instalment No. 6

No. 50 20 Shares

THE X. Y. Z. COMPANY
120 Broadway
New York City

$200.00

Received of Arthur F. Greb the sum of Two Hundred Dollars, instalment payment No. 6 of Ten Per Cent upon his subscription for Twenty Shares of the Capital Stock of The X. Y. Z. Company.

New York City, N. Y. C. B. Fay,
December 15, 1924 Treasurer

Fig. 7. Treasurer's Receipt for Instalment Payment on Stock Subscription

The Comptroller

PLACE IN ORGANIZATION.—The comptroller should have a close and intimate knowledge of the business and its operations. He may be a member of the executive committee. His **position in the corporate organization** should be as follows:

1. He should be **responsible to the president.**

2. He should be a **member of the operating committee** or group consisting of the president, treasurer and heads of operating departments, and as such should advise and recommend as to costs, expenses, possible economies and probable financial outcome of contemplated projects of all kinds.

3. He should have full and sole **authority to prescribe accounting methods** of the company and its subsidiaries, subject to orders of the president or directors in major matters.

4. He should be held **responsible for the accuracy of the accounts and of financial and statistical statements and reports** compiled for executive guidance

and other purposes. In so far as discretionary entries (such as depreciation) are dictated by the president or directors, he must execute faithfully their orders, whatever his own recommendations or thoughts may be.

5. His **administrative authority,** other than to prescribe methods, should not extend beyond the accounting department at the home office of the corporation. The chiefs of the operating divisions should be fully responsible for the bookkeepers and clerks under their jurisdiction subject to internal audits by employees acting for the comptroller. Accounting methods prescribed by the comptroller for departments not within his administrative jurisdiction should be put into force by order of the president. All accounting methods and procedures for departments other than his own should be in writing and have the signed approval of the president of the company shown thereon. These written and approved systems and procedures should be filed as a permanent record for reference in case of dispute or misinterpretation.

6. He should advise and co-operate with the officials of the company and heads of the various departments in all matters in which the accounts may be a source of information or may be affected.

RELATIONS WITH PRESIDENT.—The comptroller should advise the president on such matters as these:

1. Margin between selling prices or rates, and costs of products or services both past and prospective.
2. Budget of revenues, costs and expenses; regulation of overhead expenses, subject to control as volume of business recedes and expands.
3. Budget of financial requirements and policies pertaining thereto.
4. Depreciation rates and the policy of the company in distinguishing between charges for additions, betterments, replacements and repairs.
5. Reserves to be provided in the discretion of the directors for liabilities of uncertain amounts and for contingencies.
6. Contracts and leases in so far as they are related to accounts or finance.
7. Substance and form of reports for stockholders and financial publications.
8. Form of votes to be passed by executive committee and by directors in so far as they may affect accounts.
9. Corporate reorganizations.

DUTIES OF THE COMPTROLLER.—Of the **specific duties** of the comptroller, these are important and typical:

1. Supervision of all the **corporate accounts** of the company and custody of the ledgers and other books of account at the general office of the corporation. The comptroller should rely upon a chief accountant to be the administrative head of the accounting department.
2. Approval of **financial statements,** periodic or special, prepared by the accounting department for the president or other officers, such as balance sheets, income statements, operating statements of the various divisions of the company, budgets, schedule of commitments, etc.
3. Approval of all **financial data** embodied in text of statements to be given out for publication.
4. Approval of all **financial returns** required to be filed by a statute or regulation, except that returns to be filed abroad may, by special arrangement, be filed without being referred to the comptroller.
5. Prescribing all the **accounting methods** of the company, not only for the home office but for all divisions, branches, etc., and for subsidiary companies, including payrolls, petty cash funds, inventories, plant

and equipment, costs, branch accounts, transit items, foreign exchange, etc.

6. Direction of **internal audits** of cash funds, securities, inventories of materials and supplies, accounts receivable and other accounts as may be made from time to time during the year.
7. Preparation of **special journal entries** to put into effect votes of the executive committee and directors in as far as they may pertain to the accounts.

RELATION TO COUNSEL AND TREASURER.—The comptroller should advise the **company's counsel** on such matters as these:

1. National, state and local taxes, including returns, assessments, bills, claims and adjustments.
2. Clauses in contracts in as far as they may have a bearing on accounts or finance.

The comptroller should co-operate with the **treasurer** in such matters as these:

1. Adjustment of coverage for all insurable risks as changes occur in location, valuation and volume of properties or hazards to be insured (assuming that the treasurer is responsible for insurance).
2. Budget of financial requirements.
3. Overdue accounts receivable to be followed up by credit department under the treasurer.

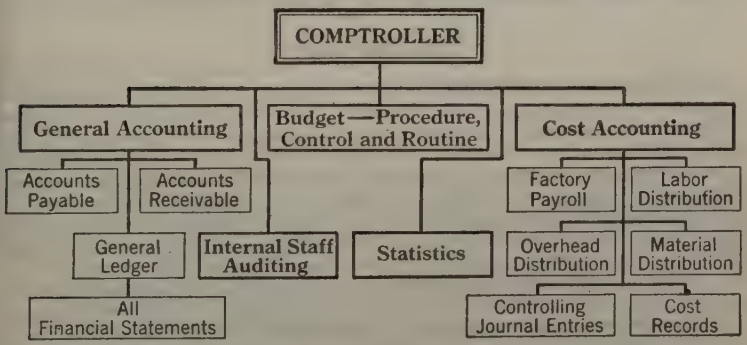

Fig. 8. Chart Illustrating Organization of Comptroller's Office

COMPTROLLER'S OFFICE ORGANIZATION.—The chart in Fig. 8 illustrates in a general way the organization of the comptroller's department. Although the duties may vary in different corporations, the functions described in the chart represent those which the comptroller should direct. The **general accounting** division keeps the general ledger, accounts payable ledger, accounts receivable ledger and related books and records at the home office of the corporation, and attends to the **preparation of financial statements.** The comptroller should train a **chief accountant** capable of assuming full responsibility for this division, a man on whom he can rely for the preparation of periodic statements of earnings and expenses and periodic statements of financial condition. Equally competent should be the head of the **cost account-**

ing division. On him devolves the responsibility of analyzing inordinate costs, and needless expense and avoidable waste. His statistical reports should be replete with constructive suggestions.

The **financial budget** should always be placed under the direct control of the chief executive of the company. A **budget committee** may be provided for in the organization. The committee may consist of the sales manager, production manager, treasurer and comptroller who may meet and advise in the preparation of the budget for the chief executive. The actual **carrying out of the budget** should not be left to the committee but should be under the comptroller who should have general supervision over the preparation and execution of the budget program. The comptroller is usually also made responsible for the **collection of all statistical data.** The vital statistics of an enterprise are prepared from the financial statements, both general and cost, from various production department reports, sales reports, etc. The comptroller should provide the statistics desired and used by the management and he should also gather facts which he believes have a vital bearing on the proper management of the business. The collection of statistical information for any enterprise is usually inaugurated by the comptroller, primarily to aid him to obtain suggestions for the improvement of the business as a whole.

The comptroller has authority over the **internal "staff auditing."** This means the checking of records and procedures such as payrolls, cash funds, securities owned, branch office accounts, employees' time records, continuous inventories of materials, allowances to customers, salvage and by-product revenues, records of non-durable tools, removals of equipment and the like.

The Secretary

SECRETARIAL FUNCTIONS.—The secretarial function is a **ministerial function** of the corporation. The secretary is the ministerial officer. By that is meant that his duties leave little to his discretion, as contrasted with the duties of the executive officers. To a larger extent than is the case with the other officers, the secretary's **duties are prescribed by law** both as to their nature and the manner of their performance. The secretary's office is one of more limited authority than those of the executives, and the expression of its functions is more circumscribed. The secretary discharges those specified official duties that arise from the designated facts of the existence and form of the corporate entity and its relations to the law and to its owners or stockholders, and in some measure its relation with those with whom it does business. These duties are common factors of all corporations, regardless of the nature of their objects and purposes. The secretary, his office and the proper exercise of the function of his office, are necessary to the continuation of that condition which is expressed by the statement as to any corporation that it is "duly organized and existing under the laws of" the state of its domicile.

THE SECRETARY'S OFFICE.—The office of the corporation secretary is, like that of the president or chief executive, a **statutory office.** The laws of practically every state mention the secretary in specific terms or designate certain acts to be performed by him. Expressly and impliedly, the general corporation laws of all of the states provide for the office of secretary. He is **elected** by the act of the owners of the corporation, the stockholders, or by the agents of the owners, the board of directors. Elections, however, are not often conducted by the stockholders themselves, even where the statute points out the way to their retention of the choosing of the officers as a matter for their

own meetings. The practical method is to establish **by-laws providing for elections of officers by the board of directors.** Several states require this to be done; the provision in this respect of one state being that "the directors shall elect officers." The board is better situated to select the individual for the office than the larger body of stockholders, especially when there is a vacancy to be filled as the result of resignation, death or disability. The secretary is one of the officers **elected for a specified term.** This is usually limited by the by-laws to one year, with a provision for remaining in office "thereafter until other successors are duly elected and qualified."

OATH OF OFFICE.—The general corporation acts of a number of the states have the requirement that "the secretary shall be sworn to the faithful discharge of his duty." The oath is usually administered by a director, or the president, or a notary public, in the presence, whenever possible, of the board of directors at a meeting. It is then subscribed in writing, in similar words, and acknowledged by the notary. The **written oath** is referred to in the minutes as being "in the form presented at this meeting," which usually is typewritten on a minute book page. A sufficient form of oath is shown as follows:

SECRETARY'S OATH

CITY OF..... }
COUNTY OF..... } ss.:

....., the secretary of the.....
.....being duly sworn, upon his oath deposes and says that he will faithfully discharge the duties of secretary of the aforesaid corporation.

.....
Secretary

Subscribed and sworn to before me
this.....day of.....19..

.....
Notary Public

My commission expires.....

The fact that the oath was taken by the secretary may be shown by the signature of the officer administering it, subscribed to a form similar to the foregoing. The wording of the oath, to be subscribed by the secretary in writing may be in the first person as follows:

I, ... do solemnly promise and swear that I will faithfully, impartially and justly perform the duties of secretary of the ...., a corporation of the state of....., according to the best of my abilities and understanding. So help me God.

The phrase "according to the best of my skill and ability" is sometimes used. The minutes of the meeting at which the secretary's oath is administered recite the fact that it was duly taken and subscribed: "This was accordingly done, and the secretary entered upon the discharge of his duties."

THE SECRETARY'S DUTIES—GENERAL.—The by-laws usually attempt to specify the duties of the secretary. They cover specifically in most instances his important duties, sometimes repeating the words of the statute as to those mentioned therein. The **principal duty** of the secretary is undoubtedly that he shall record the proceedings of all meetings of the stockholders and directors. This is variously expressed in state laws. They all mean that it is the duty of the secretary to make a record of all the proceedings of the meetings of the stockholders and the board of directors whereby either the body of stockholders or the board of directors performed any act binding upon the corporation,

and to set up this record in such form as to make it available for future reference. The **other duties** of his office are in general to issue notices of directors' and stockholders' meetings; to keep stock certificate books and transfer record books; to attest with his signature and impress with the corporate seal all stock certificates and certain contracts of the corporation; to have the custody and charge of the corporate seal and all such corporate books, records and papers as may belong to his office; and to prepare such lists of stockholders as the statutes may require. Following the statement of these duties, as they are arranged for the usual codes of by-laws, there often appears a general provision as to others not designated in detail, this by way of the concluding phrase, "and such other duties as may be incident to his office."

Secretary's Duties in Relation to Law

All of the secretary's duties are identified with the corporate entity and its relations to the law, to the stockholders and to third persons. These relations overlap, but a classification of the secretary's duties under the general headings of

1. Relations to the law
2. Relations to stockholders
3. Relations to third persons

will afford a better basis of analysis and description than any of the arrangements in the ordinary by-law form.

REPORTS, STATEMENTS, ETC. REQUIRED.—The duties in relation to the law embrace those wherein the secretary must attend to specific requirements of the law. These requirements include reports, statements and certificates which must be filed in the office of the Secretary of State, and in some instances must be recorded, in the same manner as the articles of incorporation, in the county in which the corporation has its principal place of business or is transacting business. Such documents relate to many features and details of the corporate existence and business; and as between the different states, are varied in their respective designations as well as their forms and requirements. Thus they are known as reports, statements, affidavits, certificates, schedules, returns and exhibits. The significance of all of them lies in the fact that they furnish the various governmental agencies, which usually supply blanks for the purpose, the particular information desired. This is sometimes elicited by a form which requires the corporation to answer interrogatories.

All such documents may be considered presentations of information. Some of them are required periodically as, for example, **annual and quarterly reports,** these being intended to reflect in most instances the general condition of the corporation, with occasional special reference to a particular subject such as the production of natural resources. Schedules, reports, or returns must be prepared and filed concerning such matters as gross income, income from manufacturing, income from exports, gross earnings and receipts, invested capital, capital stock authorized or outstanding, real and personal property and tangible and intangible property.

The condition disclosed by these may be the basis of one or more kinds of tax, such as personal property, real property, franchise privilege, license, production, income, profits, or excise tax. Or the information presented may have to do with such of the corporate characteristics and details as supplemental issues of stock, changes in the by-laws or the charter or the articles of incorporation, changes in the number of directors or the officers, the proportion of capital employed within the state, the appointment of agents for service of

process and other purposes, powers of attorney, elections of directors, votes at meetings, combinations in restraint of trade, occupational licenses, registrations, mortgages, reductions and equalizations of assessments and taxes, dividends paid, tax refund claims, or the oaths of office of various officials such as inspectors of election. It may even have to do with campaign contributions. These and all other matters of detail concerning which information must be given, are within the purview of the secretarial function to the extent that the secretary is relied upon to assemble and prepare most of the information presented, to attend to the execution of the documents by means of which the requirements of the law are met, and to see to its proper filing.

This is true also of the preparation and filing of various kinds of **applications,** such as applications to other states for admission to parity with corporations organized and existing under the local laws, and for permission to sell securities under the so-called "blue sky" laws. It is likewise true with relation to **certificates of authority** to resident and other agents, and with reference to lists, such as lists of transfers of stock of non-residents of the state, and lists of resident stockholders and bondholders, which are required for specific purposes of the law, in addition to the lists which must be perpared in connection with elections at stockholders' meetings.

The relations of the secretarial function to the law keep the secretary in contact with various ministerial officers of the state such as the Secretary of State, with various state bodies, such as corporation commissions and railroad commissions, and with numerous other governmental officers and agencies, such as industrial boards, tax assessing bodies, state treasurers, auditors and factory inspectors, and with bureaus, boards and departments, such as those concerned with statistics, labor, tax equalization and industrial relations.

Some states require **duplicate records,** as when the corporation maintains only the statutory office in the state of its domicile and transacts its business in another state in which it is qualified as a foreign corporation licensed therein. These records generally include the details of stock transfers as reflected by the stockholders' ledger. The particular reports which are necessary in any state are, of course, governed by the laws of that state. Those which require to be taken into account by a particular corporation are the ones required by the state of its domicile and the ones necessary in other states in which it is licensed as a foreign corporation to transact business.

SECRETARY'S ATTESTATION AND SIGNATURE.—The secretary's legal duty is to attest, or sign, and affix the **corporate seal** whenever the law requires this to be done. Each such document expresses a feature of the corporation's contract with the state, and the maintenance of the relations based upon that contract is part of the secretarial function. The making of any such report, statement or certificate may be an act of the owners or the executives, i.e., the stockholders or the officers; but the secretary by his attestation or certification of such an act completes the contact with the law and enables the state to accept and file the evidence of the act, with the assurance that the thing said to have been done was in reality accomplished. The state has this assurance in respect of things done, and conditions disclosed, and the legal right to rely upon it because of the attestation or certification of the proper legal officer, the secretary. In so far as the statute may be concerned, some of these documents could be prepared and filed without any attention by the secretary. But the scope of his duties, embracing as it does these relations of the corporate entity to the law, does not stop short of complete responsibility for all such reports, statements and certificates required by law, even when an

executive officer is the agent of the corporation whose signature and oath are necessary to make the document complete.

SUMMARY OF SECRETARY'S DUTIES AS TO REPORTS, STATEMENTS AND CERTIFICATES.—The secretary, therefore, makes it his business—

1. To know what reports, statements and certificates are required;
2. To know when as to time, and under what conditions as to corporate events, they must be filed;
3. To see to it that they are properly prepared, executed and duly filed;
4. To record such of them as may have to be recorded; and
5. To keep a record of all such things done.

RECORD OF REPORTS REQUIRED.—The **proper way** to make the record of these things is for the secretary, at the next meeting of the board of directors, to report to the effect that a statement, certificate or report, as the case may be, was prepared, executed and filed—and placed on record with a county officer, if necessary—in the form of the copy thereof then and there presented. The **copy of the document** is then placed in the secretary's files, and the fact that it was duly submitted as provided by law receives mention in the minutes by way of the secretary's report. This attention to these matters of law will avoid the penalties for failure to file reports imposed by the laws of many of the states.

LISTS OF STOCKHOLDERS.—There is the specific requirement in the general corporation acts of some states that the secretary shall make, at least 10 days before each election, a complete alphabetical list of all of the stockholders entitled to vote at such election, with the residence address of each stockholder and the number of shares held by each, which list shall, during the usual hours for business, be kept at the principal office of the corporation or at the place where the election is to be held, and during those hours, and also during the time of the election be open to the examination of any stockholder. The statutory instructions are very specific. The list is expected to be in the custody and charge of the secretary during the time it is open for inspection, and is dependent upon the stockholders' ledger or stock books of the corporation for its correctness.

SPECIAL TAXES ON STOCK ISSUES AND TRANSFERS.—The federal revenue acts, and the laws of various states, provide special taxes upon the issue and transfer of stock as evidenced by certificates for the shares of the same. The tax is paid by affixing stamps at certain rates per unit of value. The **affixing and cancellation of these stamps** are duties of the secretary. They are generally affixed to the stub of the certificate, and cancelled thereon.

The United States government under the Revenue Act of 1924 imposes on the original issue of stock of a corporation whether newly organized or a reorganization, a stamp tax of 5 cents on each $100 of par value or fraction thereof. Where stock is issued without par value the tax shall be 5 cents per share unless the actual value is in excess of $100 per share in which case the tax shall be 5 cents on each $100 of actual value or fraction thereof. Where the actual value is less than $100 per share the tax shall be 1 cent on each $20 of actual value or fraction thereof. The stamp should always be affixed to the stub in the stock certificate book and not to the certificates issued. These stamps may be purchased in various denominations at all post offices and at the office of any collector of internal revenue. When stamps are affixed by the secretary, he should write or stamp thereon his initials and the date upon which the same

is attached or used, so that the stamps may not be used again. Failure to comply with this law makes the corporation liable for penalty.

CUSTODY OF CORPORATE DOCUMENTS.—It is sometimes the case that the secretary not only is given the usual custody and charge of the corporate seal, the minute book and the certificate books, but also is held responsible for the safe-keeping of numerous books, papers, records, documents and memoranda. It is part of the secretary's duty to be responsible for all papers brought before the board for action or ordered on file, and of all written contracts, deeds, insurance policies, leases, records and evidence of title to real estate and other property, (except moneyed securities) owned, held or controlled by the company. These are matters too closely identified to the corporate entity and corporate acts to be dependent for their safe-guarding upon any other than the ministerial officer. Thus a provision to this effect in the by-laws is a legitimate basis; and the secretary is not only the custodian of all such things as to their safe-keeping, but also sees to it that they are properly and conveniently filed for quick reference.

CONTACT WITH COUNSEL.—The secretary should be permitted to maintain at all times **personal contact with counsel,** so that all of his acts in relation to the laws under which the corporation exists and conducts its business in one state or several, will be performed with safety and certainty, and without apparent inconsistency in so far as other corporate relations to the state may be concerned. Advice of counsel is the factor of safety in all such matters as determinations of the proportion of capital or capital stock employed in the various states, the details of the recording of instruments of title to property (in some jurisdictions these will be found to relate to stock transfers), the preparation of statements and reports in connection with the sale of securities, the formalities and details of bond issues, amendment of the articles of incorporation, the preparation of directors' or stockholders' resolutions covering the acquisition or disposal of property or the exchange of shares of the capital stock for any equivalent of money allowed by the statute, the drawing of resolutions concerning valuations and appraisals, and the preparation of all reports, certificates, exhibits, returns, affidavits, statements, certifications, deeds, instruments of title—or other documents evidencing the condition or the act of the corporation—which are out of the ordinary, or for which there is any precedent in the secretary's previous experience.

Duties of Secretary in Relation to Stockholders

RIGHTS OF STOCKHOLDERS.—The secretary's relation to the owners or stockholders is concerned with the **contract between them and the corporation.** This contract embraces the division of the capital stock into the units or shares, and the ownership of these shares by the stockholders under the privileges and restrictions of the law. The rights of the stockholders with which the secretary has to do are:

1. To possess and hold certificates representing the number of shares owned.
2. To sell and deliver these shares by proper delivery of the certificates representing them.
3. To receive notices of stockholders' meetings.
4. To attend such meetings in person, or be represented thereat by proxy.
5. To participate in the proceedings of and vote at such meetings.
6. To share in all dividends declared by the board of directors.

7. To share pro rata, upon dissolution of the corporation, in the distribution of such of its assets as remain after creditors are paid.
8. To examine the corporate books under certain conditions.
9. To invoke the aid of the courts for protection against mismanagement, likewise under certain conditions.
10. To subscribe in proportion to the number of shares owned, for any increased capital stock.

CERTIFICATE OF STOCK.—Stock in a corporation is ownership. Shares are units of ownership and the evidence of such ownership is the stock certificate. Under **the common law** stock certificates are not negotiable, but, as a result of **commercial custom,** they have been largely treated as negotiable instruments and in some states, including New York, are held to be negotiable instruments under a statute known as the **"Uniform Stock Transfer Act."** In other words, if the stockholder endorses them in blank and after loss or theft they come into the hands of an innocent person for value, the innocent person has good title. On this account if a stock certificate is lost the transfer agent should be notified at once. If the certificate is not found, the former owner may obtain a new one by putting up a bond to protect the company against the claims of a possible subsequent innocent purchaser. In case of any doubt or dispute as to the ownership of a stock certificate, the corporation should not transfer it until the question of title has been definitely settled.

The **elements of the stock certificate** which fall within the secretary's continuing duties are the stockholder's name, the number of shares, the date and number of the certificate, the signatures of the officers (the president or vice-president and the secretary; or, occasionally, the treasurer) and the impression of the corporate seal. A person may be a stockholder without possessing a certificate. A certificate of the number of shares subscribed for is not necessary to constitute the subscriber a stockholder. The certificate is merely **evidence of ownership of stock,** convenient alike to the owners in simplifying the process of assigning and transferring it, and to the corporation in maintaining proper contact with the owners; but it is desirable from every standpoint, both as to law and practice, to issue certificates as quickly as possible to all shareholders. Delivery of the certificate is necessary to the completion of the issue of shares represented by it. The date of the certificate is usually regarded as the date of issue of the shares. The name of the stockholder, the number of shares represented by the certificate, and the date and number of the certificate itself, are matters for the secretary's record.

RIGHTS OF STOCKHOLDERS OF RECORD.—Stock **assigned by endorsement of a certificate,** whether in blank or complete, still stands on the books of the corporation in the original owner's name until the certificate is surrendered and proper entries are made on the stock books of the corporation. Until this is done the original owner is still the stockholder of record, and while subject to any stockholder's liabilities accruing meanwhile, has, on the other hand, a legal right to vote and to receive payment of any dividend declared even though the actual sale of his stock was consummated months before. His **right to vote** is absolute and after its exercise cannot in any way be overturned or questioned. His **right to dividends** is qualified, as the dividends belong to the actual owner of the stock, namely, the person possessing the duly signed stock certificate, to whom the holder of record must account. His responsibility as to any stockholders' liability is, as to the corporation, absolute, but for any such payments he has recourse to his assignee.

STOCK CERTIFICATE BOOK.—The basis of the secretary's record of stock and stockholders is the stub of the **stock certificate book** numbered to correspond with the certificates which are made out, signed, sealed and delivered to the stockholders. The stub should bear the name and address of the stockholder, the number of shares, the date and number of the certificate, and sufficient data concerning the source of the shares issued to show whether the title to them is passing in the present transaction from the corporation to the first owner by way of original issue of the stock, or from a former owner to the present owner by way of a transfer of the shares represented by a certificate previously outstanding. If the title to the shares is passing by transfer, the number and date of the certificate surrendered or canceled for the purpose of such transfer should also be entered on the stub of the new certificate issued in its stead. In addition to the foregoing, the stub should also carry the **receipt of the stockholder** for the certificate. This receipt should be by way of the personal signature of the individual whose name appears on the face of the certificate. If it is not convenient to obtain this upon the stub, it may be secured by delivering with the certificate a receipt which can be returned and pasted to the stub. A convenient form for such receipt is as follows:

SHARES..... DATE.....

Received from the ..... Corporation
Certificate Number ..... for ..... shares
of the capital stock thereof.

.....

CARE IN PREPARING STOCK CERTIFICATES.—There is no duty of the secretary more productive of satisfactory results, when properly attended to, and more prolific of trouble, when carelessly performed, than the duty of preparing and issuing stock certificates. The high degree of care and attention to detail in handling the **stock certificate book**—the certificates and the corresponding stubs—will not only simplify the work of preparing and keeping in order all subsequent stock books and records, but will also sustain the use of the certificate book as the only record of outstanding stock, a practice which is common to many small corporations in states where stock books are not required by law. This is possible because the stock certificate book is the **book of original entry** as evidence of ownership of the shares. In handling stock certificate books, particularly those in which the certificates and their corresponding stubs bear printed numbers, no certificate is permitted to be destroyed. If one is spoiled in the making, it is nevertheless pasted to its stub and protected against any possible further use by mutilation, the same as a surrendered canceled certificate, and a note made on the stub to the effect that the certificate is void and its number withdrawn from circulation.

Great care should be exercised by the secretary in preparing and issuing stock certificates in order to avoid mistakes. If error is discovered on the certificate before it is sent out, such as a misspelling of the shareholder's name or an incorrect number of shares, the certificate should be properly canceled and gummed back to the stub from which it was originally taken. **Erasures** should never be made on such certificates and under no circumstances should the certificates be destroyed, as all the certificates should be satisfactorily accounted for either as being in the stock certificate book or in the hands of the stockholders. A corporation is responsible for any fraud or error permitted by its officers for the issuance of stock. If a secretary **erroneously issues** a certificate for 100 shares instead of 10, and such certificate finds its way into the hand of an innocent person for value, the corporation would be held liable and the innocent stockholder would be protected from loss.

STOCKHOLDERS' LEDGER.—The stock certificate book is a record in chronological order of certificates issued without reference to the aggregate number of shares held by one owner. Its guiding feature is the number of the certificate. The stockholders' ledger—alphabetically indexed—is also a record of the certificates issued, with the ledger characteristic, however, that all stock transactions are grouped with reference to the individual stockholder. There is a **ledger account for each owner** with entries for shares issued and transferred. The stockholder is credited with the shares issued and is debited with the shares transferred. In some states the stockholders' ledger is required to be kept; in a few it is held to be the book from which the right of the stockholder to cast votes for the number of shares owned by him shall be determined as to the number of such votes.

When the corporation has more than a few stockholders, this ledger is of practical importance in keeping account of the outstanding stock. Printed forms are available for this kind of stock ledger, some of them in ledger binding and others so adapted that they can be included by insertion as sheets between the covers of the minute book. The list of stockholders, hereinbefore mentioned as required by the statutes of a number of states in connection with meetings for election purposes, furnishes a means of arranging the stockholders alphabetically and setting down the aggregate number of shares owned by each. Lists of this kind made up with due regard for the number of certificates represent an aggregate of the shares held by each stockholder and furnish a convenient working basis for setting up the stockholders' ledger accounts.

The stockholders' ledger speaks in terms of shares. The stock certificate or the transfer book may be used as a journal from which to post to the stockholders' ledger the debits and credits to each individual account as certificates are issued or surrendered. The balances are brought down on each stockholder's account after a transfer is made. Fig. 9 shows a typical form of stockholders' ledger.

JAMES D. HENDERSON,
700 Lincoln Street,
Chicago, Ill.

Date	Transfer Page	Certificate Number	Shares Dr.	Shares Cr.	Cr. Balance
1924					
Jan. 7	Original	27		1,716	1,716
" 25	217	92		192	1,908
Feb. 2	229	92	100		1,808
Apr. 27	241	416		80	1,888
July 9	263	27	16		1,872
Sept. 16	280	519		90	1,962
Dec. 30	314	416 & 519	170		1,792

FIG. 9. Form of Stockholders' Ledger

STOCK TRANSFERS.—When stock is transferred, one of the following courses is ordinarily used:

1. The certificate is **assigned in blank** and delivered to the transferee, in which case the assignment is absolute and the certificate may then

be passed from hand to hand and the ownership of the stock it represents be thereby transferred any desired number of times without change of or addition to the assignment.

2. The assignment on the back of the certificate is completed by the **insertion of the name of the transferee** and the delivery of the certificate to the transferee, in which case the certificate must be surrendered and a new certificate taken out by the transferee before it can be again transferred.
3. The assignor completes the assignment form on the back of the certificate, **surrenders the certificate to the secretary of the company,** and secures and makes delivery of a new certificate in the name of the transferee.
4. The certificate is delivered to the transferee **without indorsement,** but accompanied by an **instrument of assignment or power of attorney** having the same effect as the indorsement upon the back of the certificate.

When transfer is made by delivery of the certificate with the name of the transferee inserted in the assignment, the transfer is not made on the books of the corporation until the assigned certificate is surrendered. In the meantime the original owner is still the owner of record and will therefore be held should any stockholders' liabilities arise, although as between the immediate parties the transfer is complete, and the transferrer could recover from the transferee any assessment or other moneys which he might be compelled to pay as a stockholder of record. This objection, when the stock transferred is full-paid, is not in most states material in the case of ordinary business corporations; but when stock of banks, trust companies, or other financial corporations is transferred, or when stock is not full-paid, it may be material and even vital.

TRANSFER BOOKS.—While the duly assigned stock certificate is good evidence of the ownership of stock, such ownership is not effective for corporate purposes until the transfer has been recorded upon the stock books of the corporation. The holder of such a certificate may force the proper entries upon the corporate books but he cannot exercise the rights of the stockholder until such record has been made. Hence the importance of a carefully kept stock book. Books of this kind are a matter of standardized stationery, and like the stock certificate books and stockholders' ledger sheets, are available for purchase in a variety of forms. The operation of transferring stock consists of transferring shares from one ownership to another **on the books of the corporation.** The term "books" includes those herein mentioned, together with such additional means of recording transactions relating to stock as may be employed; but the significance of "books" is usually completely met by the stock certificate book. The substitution of a present owner of stock for a previous owner is accomplished on the books of the corporation by the surrender and cancellation of the certificate representing the shares held by the previous owner and the substitution therefore by issue of the certificate representing the shares in their new ownership. . . . .

The transfer book is found in **two general forms.** As usually kept by the **smaller corporations** it consists of a series of blank transfers or assignments bound in book form. These are filled out and signed by the owner of the stock or his duly authorized attorney when the actual transfer of stock disposed of by him is made upon the books of the company. They are primarily designed to be formal evidence of the transfer of stock. They are also the secretary's authority for the issuance of new certificates of stock to the assignee

in place of the old certificates surrendered. A different form of transfer book is used by the **larger corporations** where the number of transfers is too great to permit of the convenient use of the form already described. In this only one line is required for each transfer of stock, the transferee or his duly authorized attorney signing in the right-hand column.

It is but seldom that the transferrer makes the transfer on the books of the corporation in person. In perhaps 99 cases out of 100 he merely signs in blank the assignment on the back of the certificate and turns it over to the transferee. The name of the attorney to make the transfer is then inserted at the time the certificate is presented for transfer either by the party by whom the certificate is surrendered or by the secretary who usually inserts his own name or makes the transfer.

ESSENTIALS OF STOCK TRANSFER.—The essentials of a transfer are (1) a change of ownership in fact, (2) satisfactory evidence of this by proper endorsement, (3) the surrender and cancellation of the certificate so endorsed, and (4) the preparation and delivery, or, in other words, the issue of a new certificate for the number of shares transferred. Shares of stock are personal property. Title to them passes by delivery of the certificate representing them, the certificate being endorsed in blank or accompanied by a writing equivalent of such endorsement. **Endorsement in blank** means that the signature of the vendor appears as having been subscribed to the form as shown below, which usually is on the back of the certificate.

For value ..... hereby sell, assign and transfer unto .....
..... shares
of the capital stock represented by the within certificate and do hereby irrevocably constitute and appoint .....
attorney to transfer the said stock on the books of the within-named corporation, with full power of substitution in the premises.
Dated ..... 19..
In presence of .....
.....

This form is an assignment accompanied by a **power of attorney.** By his signature the vendor completes a **bill of sale** of the shares represented by the certificate, and authorizes the transfer to be made on the books of the corporation. As between vendor and vendee no entry on the books is necessary to pass title to the shares; but as between the vendee and the corporation the transfer on the books is necessary to enable the new owner to exercise any of the rights of ownership, except the one he holds by virtue of his possession of the certificate properly endorsed; for the holder of such a certificate has only the right to have a new certificate issued in his name and delivered to him, namely, the right to have himself recorded on the books of the corporation as a stockholder. Until he is so recorded and regardless of the time he may have possessed the endorsed certificate representing the shares acquired by him, he is not entitled to be treated by the corporation as one of its stockholders. The corporation has no duty to any owner of shares other than those whose names appear as such upon its books, except the duty to make the transfer under proper conditions. Stockholders in whose name certificates are recorded upon the "books" of the corporation as outstanding are **"stockholders of record."**

The assignment and power of attorney has blanks for the signature of the transferrer (vendor), and for the transferee's name, the number of shares, the name of the attorney-in-fact, the date and witnesses to the signature of the transferrer. Sometimes, as in the case of **floating or "street" certificates** in

the hands of brokers, an acknowledgment or guaranty of the genuineness of the transferrer's signature is necessary to good delivery, and when that is the case it also appears as an element of proper endorsement. The **steps in the process of transfer** are (1) endorsement, (2) delivery, (3) surrender of the certificate by the owner, (4) entry of the proper information on the books of the corporation, and (5) issue and delivery of the new certificate by the secretary of the corporation.

CARE REQUIRED IN TRANSFERS OF STOCK.—It is necessary for the secretary to exercise extreme caution in the matter of transfers of stock. This part of his duties is beset with a large number of legal and practical complications. The **acknowledgment or guaranty of the transferrer's signature** may be considered as part of the proper endorsement for transfer required on the certificate. If the acknowledgment or guaranty is so considered, this part of the entry on the back of the certificate, with the other necessary items which may be filled in, makes possible more than fifty varying combinations of the different items on the back of the certificate which might result through variations or irregularities in execution of the endorsement. Most of such variations would be merely minor differences with no effect on the validity of the endorsement. Some of the combinations, however, might produce the serious question as to the sufficiency of the endorsement. Hence, it is necessary for the secretary to be extremely careful in seeing that the whole endorsement is in such form as properly to permit the transfer requested. Usually the signature of the owner of record and the date, with some verification of the signature by witness or a guaranty or a notarial acknowledgment, will constitute proper endorsement. If the name of the attorney-in-fact must be inserted, the secretary or an assistant secretary or the transfer agent is designated to act in that capacity.

DELIVERY OF STOCK.—Delivery must also be carefully considered, i.e., delivery by way of vendor to vendee. In so far as it involves the possession of the endorsed certificate, it may not have been properly made. Thus the person surrendering such certificate for transfer to himself, may have acquired possession of it in an irregular or unlawful manner, as by finding it or by fraud. An endorsed certificate remaining in possession of the owner of record until death, and thereafter surrendered for cancellation and transfer, raises problems of **probate proceedings and inheritance taxes.** In the absence of personal acquaintance the secretary may be faced with uncertainty as to whether the individual requesting the transfer is the owner of record or his agent, or the transferee or his agent, or a person named as attorney-in-fact, or some one who is not entitled to have the transfer made.

It is, therefore, necessary for the complete protection of the corporation—

1. That the secretary assure himself as to the endorsement—by such a verification of the signature as he may secure by means of a broker's guaranty, a notarial acknowledgment, or a comparison with the signature appearing on the receipt obtained for the certificate when it was issued, or by other means such as an identification by personal contact.
2. That he know the status of the owner of record as to whether he was living or dead at the date of request for transfer, and if living, as to his age and legal competency at the date of endorsement, and if surrender is made after some time has elapsed from the date as it appears, his age and legal competency at the date of delivery of the certificate to the individual requesting the transfer.

3. That he know who is requesting the transfer—as to whether it is by a corporation under proper authority or by a fiduciary, such as a guardian, trustee or pledgee or by a court officer such as a receiver or administrator.
4. That he know the status of the legal relation to the owner of record of the individual requesting the transfer, as for illustration, in connection with any fiduciary relation which might not extend to the point of authority to have the transfer made.

The relations of agent, trustee, guardian, pledgee, and executor or administrator are sometimes matters of record on the corporation books, as, for example, when a certificate is outstanding in the name of a person as a trustee. Conditions affecting stock transfers which in the nature of things do not appear on the corporation's books include the minority of the owner of record, or his adjudgment as insane or legally incompetent, or the fact that he may have become a resident in a locality where community property laws prevail.

STOCKHOLDER'S RIGHT TO TRANSFER STOCK.—The right of a stockholder of a corporation to transfer the whole or a part of his interest therein is one of the convenient and valued features of the corporate form of commercial enterprise. Any competent person may transfer stock standing in his name. Attorneys, trustees, guardians, executors and administrators may transfer stock belonging to others upon giving satisfactory evidence of their authority to do so. Stock owned by minors and others incompetent may be transferred only by their legally appointed and authorized representatives. Few restrictions exist as to the transferees of stock. Corporate officials may at their discretion refuse to transfer stock to persons not competent to perform the duties of a stockholder, such as a minor or a person of unsound mind.

DUTIES OF OFFICERS TO TRANSFER STOCK.—The secretary or officers of the corporation must refuse to transfer or re-issue stock until the old certificate has been surrendered, or until any other proper requirements have been complied with. When, however, all proper requirements have been made they must make the desired transfer or re-issue. The **authenticity of the signature** to an assignment of a stock certificate must be satisfactorily established when necessary. In the smaller corporations the secretary is usually familiar with the signatures of the stockholders. The larger corporations sometimes require the signatures to be **witnessed or guaranteed** by some person known to the transfer agent, or otherwise that they shall be **formally acknowledged before a notary public.** If there is any doubt as to the authenticity or correctness of the assignment, or as to the title of the party presenting the certificate, or as to any other material matter, the secretary has the right to delay the transfer for a reasonable time in order to communicate with the former holder or take such other steps as he may deem expedient. If, after due investigation, there still remains doubt as to the propriety of the transfer or the ownership of the certificate, or if there be complicating claims, the secretary may properly decline to act until instructed by the board of directors, and the board, if in doubt, may decline to take action in the matter until ordered thereto by some court of competent jurisdiction.

RESTRICTIONS ON TRANSFERS.—Every stockholder whose stock is paid for in full is entitled to transfer his stock freely. Even where the stockholders have entered into a contract to restrain the alienation of stock or have enacted by-laws for the same purpose, the courts have usually set the restraining provisions aside as being contrary to public policy. Charter provisions restricting the transfer of stocks have, however, been held valid. In some states the

statutes prescribe specifically that **stock subscribed but not fully paid for** in accordance with the subscription agreement is not transferable save with the consent of the corporation. Elsewhere charter or by-law provisions may give the corporation the right to refuse to register transfers of unpaid stock. In the absence of such provision, the right of transfer is absolute and may be enforced against the corporation. At times the restriction of stock transfers becomes desirable and various plans have been attempted to effect this end. The courts, however, defend this right so strictly that its **legal waiver** is difficult. Perhaps the most successful method, when all the parties are in agreement, as to the advisability of such restraint is to form a **voting trust** for a certain number of years. All the stock—or all the stock entering into the agreement—is placed in the hands of voting trustees appointed under the terms of the voting trust agreement and is held by them, withdrawn from sale, for the period of the trust. Such arrangements are effectual and are upheld by the courts in most states if they do not extend for an unreasonable period. In some states they are expressly permitted by the statutes under restrictions as to the term of their duration.

SALE OF PART OF HOLDINGS.—Frequently the owner of stock wishes to sell or transfer only a portion of the stock represented by a certificate, and in such case the assignment on the back of the certificate, may be filled out according to the facts. For instance, if Howard Fielding owned 100 shares of stock, all included in a single certificate, and wished to sell 20 shares to James Wilton, he might fill out the assignment as follows: "unto James Wilton twenty shares and Howard Fielding eighty shares," or if the secretary will accept the somewhat informal assignment, it might be merely filled out "unto James Wilton twenty shares," it following as a matter of course that if only 20 shares are assigned, the balance of the stock remains with the assignor. The owner of the 100 shares then brings or sends in his certificate to the secretary and instructs him to make out two new certificates—one for 20 shares in the name of the new owner, the other for 80 shares in his own name. The secretary makes the proper entries on the stock book, cancels the old certificates, issues the two new certificates in accordance with his instructions, and delivers both—unless he has express instructions from the original owner to the contrary—to this original owner, who then makes delivery of the 20-share certificate at his convenience. The secretary must be governed entirely by the **instructions of the assignor in delivering new certificates,** no matter in whose name these certificates may be issued, as they are still in fact the property of the original owner.

Another and usually preferable method when but a portion of the stock represented by a certificate is to be transferred, is for the original owner to have the new certificates issued to himself. When this is to be done, he fills in his own name as assignee, instructing the secretary to issue new certificates for the proper number of shares. In the case instanced he would have two certificates issued—one for 20 shares and the other for 80 shares—in his own name. He would then assign the 20-share certificate in blank, or in the name of the new owner, and deliver it if the transaction is concluded. The new owner may then bring in and surrender this assigned certificate and take out a new certificate in his own name at his convenience. When this plan is followed, even should the sale fail after new certificates were issued, the original owner still has the stock standing on the books of the corporation in his own name and both certificates made out to him; whereas if the first plan had been followed, one of the certificates being made out to the proposed purchaser, part of his stock would stand on the books in the transferee's name, and the real owner must

either secure the assignment of this other party as a matter of courtesy, or otherwise be put to much trouble to get the certificate back into his own name.

When a certificate is surrendered for re-issue in one or more certificates in the original owner's name, the transfer may be entered on the transfer book as a matter of record, but as the owner's stock account is not affected one way or the other by the transaction, it should not be posted therefrom to the stock book. A memorandum of the facts should be made in the transfer book and on the stubs of the certificates involved in the re-issue, and the certificate numbers in the stock book must be corrected.

TREASURY STOCK TRANSFERS.—When treasury stock is donated to or otherwise acquired by a corporation, the assignment may run to the corporation direct, as "John Marshall Company"; to its treasurer, as "Treasurer of John Marshall Company"; or to a trustee, as "John H. McGowan, Trustee for John Marshall Company." The certificates so assigned are canceled when received and the proper entries are made on the transfer book and stock ledger. When such stock is held in the name of the company or even by the treasurer of the company, no new certificates need be issued until the stock is sold, the fact that certificates are not issued being noted on the stock books. When a sale of such stock is made, the new certificates are made out direct to the purchaser. Certificates might properly be issued meanwhile in the name of the company or to the treasurer if desired, but such issue is unnecessary as the data of the transfer book, the entry on the stock ledger, and the canceled certificates are quite sufficient to evidence the transaction. It is obvious that the reasons that make the certificate desirable when stock is held by an individual do not apply when a corporation holds its own stock. When treasury stock is sold, the secretary is authorized by due resolution of the board of directors to issue the proper certificates. Such transfers are entered on the stock books of the corporation as in case of any other transfer of stock. If certificates are not issued for the stock while held by the corporation, this fact should be noted on the stock books. It is not necessary to issue certificates until the stock is sold.

STATE LAWS IN RELATION TO TRANSFER OF STOCK.—The laws of the corporation's own state or the state in which the transfer is to be made may require a **transfer tax** by stamps or otherwise; or if the owner is decedent, one of these states or the state in which he lived may require **an inheritance tax** with a penalty upon the corporation for a transfer made in avoidance, even unknowingly, of its payment. The statutes in many states are very peremptory in regard to the **keeping of stock books,** providing severe penalties for failure. Thus, in New York the statutes not only prescribe heavy penalties for failure to keep stock books, but provide that no transfer of stock shall be valid as against the corporation, its stockholders, and creditors—save to render the transferee subject to a liability as a stockholder—until the record thereof has been duly entered in the stock book.

In most of the states the stock book must be kept open for inspection of stockholders or creditors of the corporation, and the provisions relating to the stock books apply both to domestic corporations and also to foreign corporations doing business in the particular state. Under a recent statute in New York this right of inspection has been somewhat curtailed, and the right is limited to judgment creditors of the corporation, stockholders who have been stockholders of record for at least six months immediately preceding the demand, and to persons holding or authorized by persons holding stock to an amount equal to 5% of all its outstanding shares. There had undoubtedly been abuse

of the right of inspection for improper purposes, or for purposes entirely foreign to the corporation, but the statute in question has received much criticism. The stock ledger is usually posted from the transfer book, though it may be posted from the stubs of the stock certificate book; and its balances may be checked from time to time by comparison with the number of shares outstanding as shown by the open stubs of the stock certificate book.

ADVANTAGE OF TRANSFER AGENTS.—Many corporations eliminate both danger and detail by appointing as transfer agents one of the several concerns that make it their business and have the facilities to anticipate and prevent the incurring of any penalty or liability in connection with stock transfers. This, however, is a delegation of a portion of the secretary's duties, the handling of such transfers being part of the secretarial function whether actually done by him or by a transfer registrar or other agent or by assistant or by another officer such as the treasurer.

A transfer agent, in the modern acceptation of the term, is one who **supervises and certifies transfers** of corporate stock. The extent of his supervision depends upon custom or upon the particular agreement. He usually keeps the stock certificate book in his custody. When a transfer is to be made, the certificate of stock duly assigned is surrendered to the transfer agent, who thereupon cancels the surrendered certificate, attaches it to its proper stub, and issues a new certificate in the name of the transferee. This certificate is then sent to the proper corporate officials who affix their signatures and the corporate seal—unless the seal is also entrusted to the transfer agent—make the proper records in the transfer and stock books, and return the signed, or signed and sealed, certificate to the transfer agent. The transfer agent thereupon seals the certificate if not already sealed, certifies it in evidence of its due issue, delivers it to the transferee, and the transaction is closed.

Occasionally when a transfer agent is employed, the **stock certificate book** is retained in the custody of the corporation. In such case, when a certificate is presented for transfer, it is canceled by the transfer agent and turned over to the corporation in exchange for a new certificate issued in the name of the transferee. This certificate is certified by the transfer agent and delivered to its owner. When the stock certificate book is kept by the corporation, the transfer agent keeps an independent record of stock certificates issued and surrendered, in order that the regularity of any particular transfer or issue may be readily and definitely ascertained.

A **registrar** is a corporate appointee who also supervises the transfer of corporate stock but does not usually carry his supervision to the same extent as does the transfer agent, his function being merely to register stock as issued. He maintains a record of all stock certificates issued and of the surrender and reissue of any new certificates with the names of the parties to the transfer. If an issue or transfer is to be made, the registrar passes upon the certificates and countersigns them if they are correctly issued. His signature is evidence of due issuance. The duties of the transfer agent and registrar are distinct, and should not be performed by a single person or institution. The function of the transfer agent is to insure the proper issue of stock. The function of the registrar is to insure the regularity of issue and to prevent overissues. The functions of the two somewhat overlap, as the transfer agent would not permit an overissue of stock nor would the registrar sign stock improperly issued.

The work of a transfer agent and registrar to be effective must be discharged by persons or institutions of the highest character and unquestioned standing. For this reason trust companies or banks are usually appointed. Speaking generally, the employment of transfer agents and registrars is advisable when-

ever transfers of stock are likely to be numerous. The procedure involved is simple in theory but in practice involves much detailed work. Also it is usually desirable that transfers be effected rapidly and accurately. The employment of the proper transfer agent and registrar, or transfer agent alone, relieves the corporate officials from the detailed work and responsibility involved, reduces the possibility of fraud or error in the issuance of stock to a minimum and affords a general safety and convenience not otherwise secured. Stock exchanges require that the securities listed by them shall be issued through suitable transfer agents and registrars.

CLOSING THE TRANSFER BOOKS.—The closing of the transfer books for a period in advance of a meeting or a dividend means that no stock transfer will be made during that period. The books used by a transfer agent or registrar are part of those meant by the expression "books of the company." In all the **larger corporations** it is customary to close the stock books to transfers prior to both elections of directors and the payment of dividends for a period of from 2 to 40 days. This is done to enable the corporate officers to make an accurate list of those entitled to receive notice of meetings and to vote thereat or to receive dividends.

In a number of states the statutes expressly authorize the stock books to be so closed to transfers. Where this is not the case, it may be provided for in the charter or by-laws. The precise number of days for which the transfer books are closed is usually fixed by the by-laws. The resolution declaring dividends usually fixes the number of days for which the books shall be closed before the dividend day, if this is not prescribed by the by-laws. In some cases the statutes or by-laws merely provide that stock shall be voted by the owner of record, as shown by the books of the company, 10, 20, 30, or 40 days before an election. This wording does not justify closing the stock books and refusing to make transfers. In such case transfers are made without interruption, but the secretary, in making up his lists of stockholders for the election, ignores transfers made after the fixed date.

No formality attends the closing of the stock books, and usually no entry thereof is made upon the books, the secretary merely refusing to transfer certificates presented to him for that purpose during the prescribed period. The notice of the annual meeting or of dividends usually sets forth the days for the closing and reopening of the transfer books. It is no part of the secretary's duty to take anything for granted, particularly in relation to stock certificates. It is, instead, incumbent upon him to proceed with an excess of caution as against the lack of it. Any matter which gives rise to doubt or suspicion in connection with a stock transfer—and this extends to and includes the issue of a duplicate certificate for one alleged to have been stolen or lost—is a matter concerning which the secretary is to consult counsel.

DELIVERY OF NEW CERTIFICATE.—Before delivering the new certificate the secretary should, when possible, require the party who presented the old certificate for transfer—who may or may not be the assignee—to sign a receipt therefor on the stub. If the new certificate is delivered by mail, it may be registered, in which case the stub in the stock certificate book, the office copy of the letter accompanying the certificate, and the returned registry receipt, which should be attached to the stub, make a sufficient record of the transaction. Blank receipts are sometimes sent with the certificates in such cases, to be signed by the recipient and returned, and these receipts when received by the secretary are pasted on the proper certificate stubs.

LOST OR STOLEN CERTIFICATES.—A stockholder, so shown by the books of his company, is entitled to every right and privilege of a stockholder without regard to the whereabouts of his certificate. When certificates are lost, the owner usually desires to have new certificates issued, not in order to secure any corporate rights, but merely to have his interest in such shape that he may readily sell, pledge, or otherwise use his stock. Stockholders have a general right to certificates and, if their certificates are lost, to have them replaced; but before it reissues any such certificates, the corporation on its part has the right to require reasonable safeguards for its own protection. The by-laws should outline the proper procedure, which must conform to any statutory requirements. A **bond of indemnity** is usually and properly required before a lost certificate is replaced, as it is always possible that the missing certificate may turn up in the hands of an innocent purchaser for value, who might have cause for damages against the corporation if it refused to recognize his rights. It is but seldom wise to re-issue lost certificates unless such bond is given. Only the absolute and irrecoverable loss of a certificate, as in case of its unquestioned destruction by fire, would justify an unprotected re-issue.

When the value of missing certificates is considerable and the circumstances are doubtful, it is sometimes best for the directors to refuse absolutely to replace the certificates until the owner secures an **order from some court** of competent jurisdiction. When this is done the directors are relieved from all responsibility in the matter. The officers of the company should never take the responsibility of re-issuing a lost or stolen certificate of stock without express authorization from the board of directors. Should they do so and the missing certificate turn up in such a way that loss is involved, they would be responsible to the corporation. In case certificates are lost or stolen, the secretary of the company or its transfer agent should be immediately notified, and such other steps be taken as may be necessary to prevent the negotiation of the missing certificates. When lost certificates are **endorsed in blank** and are presented to the transfer officers of the corporation before these officials have been notified of the loss, they may make the transfer, and the corporation will not be liable to the owner if the circumstances were such as to justify the belief that such transfer was regular and in good faith. If, however, the proper officials have been warned of the loss, or the circumstances were such as to put them on notice, they could not safely make such transfer.

INDEMNITY BOND FOR LOST STOCK CERTIFICATE.—A bond of indemnity is usually required before corporate authorities will replace lost, destroyed or stolen stock certificates. The usual form of such indemnity bond is as follows:

INDEMNITY BOND

KNOW ALL MEN BY THESE PRESENTS: That we, John R. McAllister of Yonkers, New York, as principal, and Charles Foster and Henry H. Clark, both also of Yonkers, New York, as sureties, are held and firmly bound unto the Sterling Transportation Company, a corporation duly organized under the laws of the State of New York, in the sum of Five Thousand Dollars ($5,000), to the payment of which to the said corporation, its successors or assigns, we do by these presents jointly and severally bind ourselves, our heirs, executors and administrators.

Signed and sealed this 18th day of May, 1925.

The condition of the foregoing obligation is that:

WHEREAS, The said John R. McAllister is the owner of record, as shown by the stock book of the corporation, of Forty (40) Shares of the Common Capital Stock of the said Sterling Transportation Company, each of the par value of One Hundred Dollars ($100), the ownership of said stock being further evidenced by Certificate No. 375 issued in the name of the said John R. McAllister on the 15th day of August, 1924; and

WHEREAS, The said John R. McAllister has made application to the Board of Directors of the Sterling Transportation Company for the issue in his name of a new certificate for the said Forty (40) Shares of stock of the said Company, alleging that original Certificate No. 375 is lost, stolen, or destroyed and that its present whereabouts and condition are unknown to him; and

WHEREAS, By due and formal resolution of the said Board of Directors, said application has been granted and a new certificate for said Forty (40) Shares of the stock of the said Sterling Transportation Company has this day been issued to the said John R. McAllister:

NOW, THEREFORE, If the said John R. McAllister, his heirs, executors, and administrators, or any of them, do and shall at all times hereafter, save, defend, and indemnify the said Sterling Transportation Company, its legal successors or assigns, of, from and against all demands, claims, or causes of action arising from or on account of the loss of said Certificate No. 375 for Forty (40) Shares of the Common Capital Stock of said Company and the issue of said new certificate in place thereof, and of, and from, all costs, damages, and expenses that shall or may arise because of said reissue, and shall also deliver or cause to be delivered up to the said Sterling Transportation Company for cancellation the said missing Certificate No. 375 whenever and so soon as the same shall be found or recovered, or come into his possession, then this obligation shall be void; otherwise to remain in full force and effect.

JOHN R. MCALLISTER [L. S.]
CHARLES FOSTER [L. S.]
HENRY H. CLARK [L. S.]

Signed, sealed and delivered
in the presence of:
DANIEL T. BAIRD
JOHN K. STONE

STOCKHOLDERS' MEETINGS — NOTICES OF MEETINGS.—All persons whose names appear on the books of the corporation as the **owners of record** of shares of stock are entitled to notices of meetings of the stockholders, except where the articles of incorporation provide that the holders of preferred stock having no vote shall not be entitled to receive such notices. It is the secretary's duty to serve these notices, and to see to their publication whenever necessary. **Service of notice** is had upon each stockholder by mailing to him a copy of the notice, directed to his last address as the same appears upon the books of the corporation. It is the stockholder's fault, not the corporation's, if this last address so appearing is not the correct one. The obligation of the corporation to give notice to the stockholder is discharged when the secretary so mails notice, provided the notice itself is in proper form and is mailed in due time. The by-laws usually provide for the number of days that must elapse between the mailing of the notice and the date of the meeting. This is generally 10 days **for regular or annual meetings.** Longer periods are required by some states for certain **special meetings.**

A By-law Provision Covering Notices.—A by-law provision covering notices of meetings frequently used is as follows:

> Notices of all meetings of the stockholders, both annual and special, shall be given in writing to each stockholder entitled to receive the same, by depositing, at least ten (10) days before the date of such meeting, in a regularly designated depository for United States mail, a duplicate or copy thereof sealed in a postage-prepaid envelope properly addressed to each stockholder at his or her address as shown on the books of the corporation; and any notice of any meeting so sealed and deposited in an envelope addressed to a stockholder at his or her address as the same shall appear on the books of the corporation at the date of such sealing and depositing shall be "properly addressed" for all purposes; and any failure to give, or any defect or irregularity in

giving, the notice of the regular annual meeting of the stockholders shall not affect or invalidate the proceedings of such meeting.

FORM OF MEETING NOTICE.—The notice need not be in any particular form, nor must it follow a particular style. It is sufficient if the notice of an annual meeting contains the statement that the meeting will be held at a certain hour and date, and at a designated place. The basis of a form for such a notice is as follows:

THE BLANK CORPORATION

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

Notice is hereby given that the annual meeting of the stockholders of The Blank Corporation, will be held at the principal office of the company at 298 South LaSalle Street, Chicago, Illinois, on Friday, the 25th day of November, 1925, at one o'clock P. M.

.....

Secretary

Inasmuch as the day of the annual meeting is usually designated in the by-laws, the notice sometimes contains the statement that the meeting will be "held pursuant to the by-laws." If the laws of the state, or the by-laws, provide for the closing of the transfer books in advance of the meeting, the notice may include a statement to the effect "that the transfer books will close" at the close of business on a day named, and will reopen on a subsequent date, usually the day following the meeting. The most important business of the annual meeting is the **election of directors,** and so to notice in the foregoing form, the following words are frequently added: "for the election of directors, and the transaction of such other business as may come before the meeting."

Special matters of business coming before the annual meeting are not usually required to be mentioned in the notice. But when these can be foreseen, they are stated, as a measure of precaution, and by way of preparation for their thoughtful consideration by the stockholders. These are matters of extraordinary business, and include such things as approvals of contracts, proposals to amend the articles of incorporation, amendments of the by-laws, approvals of actions of the board of directors, and votes or consents as to bond authorizations, the disposal of assets, or authorizations of term securities. Notices sometimes specify the hours during which the polls will be open for ballots cast upon the election of directors; and sometimes mention stockholders' tickets of admission, when these are necessary. The secretary does not always need the specific authorization of the board of directors to mail notices of the annual meeting. He may do this under a by-law provision, and thus in effect call the meeting by himself.

NOTICE FOR SPECIAL MEETINGS.—Special meetings usually require to be called by the president, or upon the order of the board of directors, or upon the request (generally in writing) of a certain percentage of the stockholders. To serve notice of a special meeting the secretary thus requires the specific authority of the president when the call is made by him, or of the board of directors when the call is made by the board, or by the stockholders, the request on the part of the latter that such a meeting be held being made to, and acted upon by, the board. The **business transacted** at a special meeting is practically everywhere required to be specifically set forth in the notice; and the by-laws often provide that no business that is not so specifically set forth can be transacted at any special meeting.

A **form of notice** of this kind of meeting is as shown below:

THE BLANK CORPORATION

NOTICE OF SPECIAL MEETING OF THE STOCKHOLDERS

Notice is hereby given that a special meeting of the stockholders of The Blank Corporation will be held at the principal office of the company at 298 South La Salle Street, Chicago, Illinois, on Friday, the 25th day of November, 1925, at one o'clock P. M., for the purposes of:

(a) Considering and voting upon certain proposed amendments of the articles of incorporation;
(b) Considering and voting upon certain proposed amendments of the by-laws;
(c) Considering and voting upon a proposed issue of One Million Dollars ($1,000,000.00) of Ten-Year First Mortgage Bonds of the corporation to be secured by an Indenture of Trust, to certain individuals as Trustees, covering the property of the corporation now owned and hereafter acquired to the extent described in the said Indenture;
(d) Executing, if consent to the mortgage shall be voted, such consents in writing and duplicates thereof, and in such form, as are required by law; and
(e) Transacting any and all such other business as may come before the said meeting.

Being a majority of the Board of Directors of The Blank Corporation.
{ .....
.....
.....
.....
..... }

This notice may include the basis of the call thus: "Please take notice that, pursuant to the call of the board of directors, in accordance with the by-laws, a special meeting, etc." The essential point of difference between notices of annual meetings and notices of special meetings of the stockholders is that the former need not, while the latter must, mention specifically the business to be transacted.

MAILING OF NOTICES.—The matter of mailing notices is covered in codes of by-laws that are carefully drawn. A **frequent provision** is as follows:

Whenever under the provisions of the certificate of incorporation, and/or these by-laws, and/or the statutes of the State of ....., notice is required to be given to any stockholder, director, or officer, it shall not be construed to mean personal notice unless expressly so stated, and any notice so required (except notic by publication) may be given in writing by depositing the same in any regularly designated depository for United States mail in a postpaid sealed wrapper addressed to such stockholder, director, or officer, at his or her address as the same appears on the books of the corporation, or in default of such address, to such stockholder, director, or officer at the general post office in the City of ....., County of ....., State of ..... (usually the state in which the corporation has its domicile); and such notices shall be deemed to have been given at the time when the same shall be thus mailed, and any notice given by telegraph shall be deemed to have been given at the time of delivery of the message containing the same to the telegraph company; but any stockholder, director or officer, may waive any notice required to be given under these by-laws.

It is not usually necessary to send notices of stockholders' meetings by registered mail; it is often advisable to send notices of directors' meetings in that manner. After the notices are mailed—and the mailing as well as a great many details of the secretary's work may be actually performed by someone else as well as by himself—the secretary prepares and executes an **affidavit of mailing of notice**, the necessary elements of which appear in the following:

AFFIDAVIT OF MAILING OF NOTICE

STATE OF .....
COUNTY OF ..... } ss.:

....., having been duly sworn upon his oath according to law, deposes and says that he is the secretary of The ..... Corporation, a corporation organized and existing under the laws of the State of .....; that on the ..... day of ....., 19.. (pursuant to the by-laws, or, pursuant to authority of the officer calling the meeting, or the Board of Directors) he mailed (or, caused to be mailed) a notice of the annual (or special) meeting of the stockholders of the said corporation, a copy of which said notice is hereto attached, enclosed properly in a sealed wrapper, postage prepaid, addressed to each stockholder of record at his or her postoffice address as the same on the said day and date appeared on the books of the said corporation.

Subscribed and sworn to
before me this ..... day
of ....., 19..

.....
Secretary

.....
Notary Public

Publication of notice is accomplished, wherever required, by causing a copy of the notice to be inserted in a "newspaper of general circulation." Sometimes in the published notice the word "public" is prefixed, so that the notice reads, "Public notice is hereby given, etc." The period and dates of publication are arranged for an **affidavit of publication** to be available before the meeting, so that it can also be presented and read to the stockholders. This affidavit is made and executed by the publisher and given to the secretary. It specifies the dates upon which the notice was published the requisite number of times to comply with the statute.

WAIVERS OF NOTICE.—By-law and statutory notices may be waived. The secretary, for his own protection, procures **waivers in writing** rather than in any other manner. Corporations in which there are only a few stockholders often find it convenient to hold meetings of the stockholders upon waivers of notice; and directors' meetings are very frequently held in the same way. The following form contains the **essentials of a waiver of notice:**

WAIVER OF NOTICE
OF SPECIAL MEETING OF STOCKHOLDERS OF
THE BLANK CORPORATION

WE, THE UNDERSIGNED, being all of the stockholders of The ..... Corporation, and all of the individuals whose names appear upon the books of the said corporation as the owners of the capital stock thereof, do hereby waive all notices required for the calling and holding of a special meeting of the stockholders of the said corporation to be held at one o'clock P. M. on Saturday, January 24, 1925, at the general offices of the said corporation at 298 South LaSalle Street, Chicago, Illinois, for the purposes of:

(a) Considering and voting upon a proposal to amend the articles of incorporation by increasing the number of shares of authorized common stock from one thousand shares of no par value each to five thousand shares of no par value each, and increasing the par value of the shares of the preferred stock from fifty dollars to one hundred dollars; and

(b) Transacting all such other business as may come before the said meeting;

and we do hereby consent and agree that such meeting be held at the time and place, and for the purposes aforesaid.

IN WITNESS WHEREOF, we have hereunto set our signatures at Chicago, Illinois, on the 23rd day of January, 1925, before the hour of the said meeting.

Being all of the Stockholders of The Blank Corporation { ....

PROXIES OF STOCKHOLDERS.—Many corporations send out proxy forms with notices of stockholders' meetings. The proxy is an appointment in writing. It **may be revoked** at any time by the giver, and when not so revoked is usually limited by law to a definite period, eleven months being the maximum in one state and 3 years in another. Proxies that are intended to be irrevocable or coupled with an interest so as to survive the death of the giver, are matters for the consideration of counsel. Stockholders' meetings are made up of shares of stock represented by their owners then and there present in person or by proxy. The person to whom a proxy is given need not be a stockholder. An ordinary proxy may be revoked at any time by the giver, and does not survive his death; and there is a limitation upon the time for which such a proxy remains valid. The stockholders' meeting is competent to transact business when a proper majority of the voting shares is represented by whatever number of persons may be present—as distinguished from the directors' meeting which is competent to transact business when the required number of persons is present. A proxy form is as follows:

PROXY FOR SPECIAL MEETING
OF THE STOCKHOLDERS OF
THE BLANK CORPORATION

I, THE UNDERSIGNED, a stockholder of the Blank Corporation, hereby make, constitute and appoint .....
and .....,
or either of them, my true and lawful attorney and proxy with full power of substitution and revocation, for me and in my name, place and stead, to attend, and represent me at the special meeting of the stockholders of The Blank Corporation to be held on the ..... day of ..... 19.., and all adjournments thereof, and thereat to vote upon all stock held or owned by me in all matters, and for the transaction of any and all business, that may come before the said meeting as fully and with like effect as I could if personally present and voting, hereby ratifying and confirming all that my said attorneys, or either of them, may do or cause to be done in the premises.

Dated ..... 19..

.....
Signed in the presence of: Stockholder

.....

PLACE OF STOCKHOLDERS' AND DIRECTORS' MEETINGS.—Stockholders' meetings usually cannot be held outside of the state of incorporation, except as the articles of incorporation provide for holding them outside of that state. Directors' meetings are not ordinarily so restricted.

PREPARATION FOR MEETING.—Following the call of the meeting, preparation of the list of stockholders when required, the closing of the transfer books, the mailing of notices and the execution of the affidavit of mailing (or the complete signing of a waiver of notice), the secretary concerns himself with preparations for the coming meeting. Familiarity with the by-laws, when they specify an order of business, and with general rules of procedure in meetings when they do not, aid in the orderly arrangement of documents and information relating to the business to be transacted. The **order of business of the annual meeting** may be outlined as follows:

1. Roll call of stockholders (to determine whether or not a proper majority of the voting shares are represented, in person or by proxy, by the individuals then and there present).
2. Reading of minutes of preceding meeting (approval of the same as read, or with such corrections as may be necessary, being the subject of a motion duly made, seconded and voted upon).
3. Reports of officers.
4. Reports of committees.
5. Election of directors.
6. Unfinished business.
7. New business.
8. Adjournment.

The **business of the special meeting** is generally confined to the determination of the presence of a proper quorum (the required majority of votes being greater for certain purposes of special meetings than for ordinary purposes of the annual meeting), and the transaction of the business for which the meeting was called.

It is a part of the secretarial function to make every preparation which can be thought of, by way of completing the minutes of previous meetings, and assembling documents and arranging information and reports (and sometimes circumstances) so that the meeting may proceed with dispatch. Among the details to which he attends is the checking of proxies received in advance of the meeting with the stockholders' list or the stockholders' ledger as to the number of votes represented by each proxy. For such matters as require action by resolution, i.e., matters which are of consequence or too lengthy to be handled verbally, resolutions are prepared in writing. Most of such matters can be anticipated to the extent of this preparation. It is usual thus to prepare in advance for:

1. Amendments to the articles of incorporation, or the by-laws.
2. Appointments of committees.
3. Approvals of reports.
4. Authorizations of acts to be performed in future.
5. Definitions of the duties of committees.
6. Dispositions of assets outside of sales in the regular course of business.
7. Dissolution of the corporation.
8. Ratifications of acts performed (including approval of the acts of the board of directors since the last annual meeting).

DUTIES AT MEETINGS.—The secretary is not a presiding officer. He is the **recording officer** of all of the proceedings had at meetings. Such proceedings include:

1. Organization of the meeting (by call to order, and roll call of stockholders to determine competency of meeting to transact business).
2. Reading of the minutes of the preceding meeting (and approval of the minutes as read or as ordered corrected).
3. Votes upon motions made and seconded (with special note of those carried by unanimous favorable vote).
4. Resolutions proposed (with the name of the proponent).
5. Votes upon motions made and seconded to the effect that resolutions be adopted (with special note of those carried by unanimous favorable vote).
6. Presentation of reports of officers and committees (and action taken thereon by votes upon motion or resolutions).

7. Elections of directors (including nominations made, motions that nominations be closed, motions that the unanimous ballot be cast for a single nominee, appointment of inspectors and tellers of election, inspectors' oaths, the casting of ballots, the canvass of ballots cast, inspectors' reports and announcements of elections).
8. Adjournment—(a) under by-law provision, by less than a quorum; (b) by the meeting to a day certain, for the completion of unfinished business; or (c) final adjournment, or adjournment *sine die*.

The secretary, therefore, calls the roll of the stockholders noting who (as to the number of voting shares) is present in person or represented by proxy; presents and reads the waiver of notice, or if notice was given, reads the notice of the meeting and his affidavit of mailing (and the publisher's affidavit of publication) of the same; aids the proxy committee in preparing its report upon the identity and form of the proxies; assists the presiding officer, by arrangement of the matters to come before the meeting, and the presentation of documents and information concerning matters of unfinished business; and makes a record (1) concurrently with the acts themselves, of all acts of the meeting by way of votes taken upon motions and resolution, (2) of all ballots cast, and reports and other formalities necessary, in connection with elections, and business of such importance (for example, a proposal to dissolve the corporation) as requires the vote of the stockholders by ballot.

MINUTES OF MEETINGS.—Written records of the proceedings of meetings are known as "minutes." These are written after the meeting. They are the history of what took place. They follow the general order of business in their arrangement, and include a statement of the circumstances of the calling and holding of the meeting, and an account of all of the formal proceedings whereby the meeting determined its own qualifications to transact business (as by roll call of the stockholders to ascertain whether or not a sufficient majority of the voting stock was represented by the owners of record present in person or by proxy), the presentation and reading of the notice and affidavit of mailing (and of publication, if that was necessary) or the waiver of notice if the meeting was held pursuant to waiver. The minutes are written, or dictated, in narrative form, and copied on minute book sheets.

Motions made at meetings should be seconded, and the minutes should so indicate. Nominations do not need to be seconded.

The following are, in form, representative minutes of an annual meeting:

MINUTES OF THE
ANNUAL MEETING OF THE STOCKHOLDERS OF
THE BLANK CORPORATION

November 25, 1925

The annual meeting of the stockholders of The Blank Corporation was held at the general offices of the company at 298 South LaSalle Street, Chicago, Illinois, on the 25th day of November, 1925, at one o'clock P. M., pursuant to the by-law provision for the annual meeting to be held on the last Wednesday in November of each year, and pursuant to notice of the said meeting regularly given.

The meeting was called to order by ....., president of the corporation, who presided as chairman in accordance with the provisions of the by-laws; and ....., secretary of the corporation, being present, acted as secretary of the meeting. At the order of the president, the secretary called the roll of the stockholders entitled to vote at the meeting. They were found to be present in person or by proxy, and representing shares of the voting stock, as follows:

PRESENT IN PERSON

Name	Number of Shares
.....	.....
.....	.....
.....	.....
.....	.....

REPRESENTED BY PROXY .....

Name	Name of Proxy	Number of Shares
.....	.....	.....
.....	.....	.....
.....	.....	.....

The president ordered all proxies deposited with the secretary; and appointed ..... and ..... as a proxy committee to canvass the same and report as to their regularity.

The secretary presented and read a copy of the notice of the meeting, together with his affidavit of the mailing of the same [and the publisher's affidavit of publication, where this is required by law]. These, upon a motion duly made, seconded and unanimously carried to that effect, were ordered to be included in the minutes, the notice by a copy thereof, and the affidavit of mailing of notice, by a duplicate herein executed and acknowledged in the same manner as the original as follows:

> [The copy of the notice and the duplicate original of the affidavit of mailing of notice—showing its execution, acknowledgment and notarial seal duplicated in the minutes—are omitted here.]

The proxy committee reported that all proxies were in order and that the aggregate of voting shares so represented was 1,368, which, together with the number of voting shares represented by the owners thereof present in person, constituted a majority in interest of the stockholders of the corporation. The president thereupon discharged the proxy committee, and declared the meeting competent to transact business.

The secretary then read from the minute book the minutes of the preceding annual meeting held on November 26, 1924, and the minutes of the special meeting of the stockholders held on December 8, 1924; whereupon ..... proposed the following resolution and moved its adoption:

> "BE IT RESOLVED, that the minutes of the annual meeting of the stockholders of The Blank Corporation held on November 26, 1924, and the minutes of the special meeting of the said stockholders held on December 8, 1924, as the same appear, respectively, on pages .... to ...., inclusive, and .... to ...., inclusive, of the minute book of the said corporation, together with the acts of the said meetings and all of them evidenced thereby, be, and the same hereby are, ratified, confirmed, accepted and approved."

The motion that the foregoing resolution be adopted was then seconded, and upon being put to vote, was unanimously carried.

The report of the president was then presented and read; and after some discussion of the suggestions and recommendation included therein, the following resolution was offered by .....:

> "BE IT RESOLVED, that the report of ....., the president of The Blank Corporation, this day presented and read to the stockholders of the said corporation in meeting assembled, be, and the same hereby is, accepted and approved; and
>
> "BE IT FURTHER RESOLVED, that the suggestions and recommendations contained in the said report be, and they hereby are ordered to be, referred to the Board of Directors for such action as the said Board may consider advisable."

Upon a motion duly made, seconded and unanimously carried to that effect, the foregoing resolution was adopted.

A motion was duly made by ....., and seconded and unanimously carried that the meeting then proceed to the election of

five directors in accordance with the by-laws. The president appointed .....
..... and .....
inspectors [or tellers] of election, and they thereupon subscribed and swore to the following oath:

INSPECTORS' OATH

STATE OF.....
COUNTY OF..... } ss.:

..... and ..... being duly sworn upon their respective oaths do severally promise and swear that they will faithfully, honestly and impartially perform the duties of inspectors of election at the election of directors of The Blank Corporation to be held this day, and will to the best of their ability and skill conduct the said election and a true report make of the same.

.....
.....

Subscribed and sworn to before
me this 25th day of November, A. D. 1925.

.....
Notary Public

The president announced that nominations were in order; seven persons were nominated; and the motion was duly made, seconded and carried that the nominations be closed. The stockholders prepared their ballots and delivered them to the inspectors, who received the same, canvassed the votes cast, and certified in writing that the following persons received the highest number of votes cast at the election then and there held, and thus had been duly elected as directors of the corporation for the ensuing year: ....., ..., ..., ..., and .....

The president thereupon declared the above-named persons duly elected directors of the corporation to serve until the next annual meeting, or until their successors were duly elected and qualified.

Following a motion to that effect duly made, seconded and unanimously carried, the secretary was instructed to include the report of the president in the minutes of the meeting by a copy thereof [as follows, or, as herein inserted following the last page of these minutes].

A motion was then made by....., and seconded by ..... that the secretary be instructed to include in these minutes the form of the proxy mailed to the stockholders and used at the meeting, and the report of the inspectors [or tellers] of election, each by a true and correct copy thereof. This motion was put to vote and unanimously carried; and the secretary was so instructed, and has inserted copies of the said proxy form and the report of the inspectors [or tellers] of election following page .. of this minute book.

A motion was then duly made, seconded and unanimously carried that the meeting adjourn; and adjournment was taken forthwith.

.....
Chairman

.....
Secretary

The minutes may be authenticated by the certification of the presiding officer and the secretary, as shown below:

We, the undersigned, being respectively the president and the secretary of The Blank Corporation, hereby certify, upon our respective oaths, that we were and acted as respectively, the presiding officer and the secretary of the annual meeting of the stockholders of The Blank Corporation held at Chicago, Illinois, on the 25th day of November, 1925, and that the foregoing minutes of the said meeting as herein recorded (on pages .... to....

inclusive of this minute book) are and constitute a true and correct record of all of the proceedings had, all of the acts done, and all of the business transacted, at the said meeting.

.....
President

.....
Secretary

Subscribed and sworn to before me
this 28th day of November, A. D. 1925.

.....
Notary Public

The **oath of the inspectors or tellers of election** may be included in the minutes by a copy, the executed original "subscribed and sworn to" being preserved in the secretary's files where he keeps the many documents, instruments and papers entrusted to his care. The same is true of the report of the inspectors which may be in the form shown below:

INSPECTORS' CERTIFICATE

The undersigned, inspectors of election, appointed to act at the annual meeting of the stockholders of The Blank Corporation held at Chicago, Illinois, on November 25, 1925, do report that, having first taken and subscribed the oath prescribed by law in such cases impartially to conduct the election for directors at the said meeting, we did receive and canvass the votes cast at the said election, and by these presents do certify the result of the said election to have been as follows, to wit:

Name	Votes Received
.....	1938
.....	1938
.....	1930
.....	1901
.....	1880
.....	1878
.....	1400

In Testimony Whereof, we have hereunto set our hands this 25th day of November. A. D. 1925.

.....
.....
Inspectors

MINUTE BOOKS.—A true copy of the articles of incorporation, the original code of by-laws, and the minutes of all stockholders' and directors' meetings in the order of their dates—and with the originals or copies of notices, oaths, reports, etc.—are the **contents** of the minute book. The pages are numbered; and in a proper minute book both sides of the sheet are used. The different kinds of minutes, i.e., stockholders' or directors' may be easily identified with their page numbers by an alphabetical index, by suggestion as follows:

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Authentication of Record	1
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November 5, 1924	51–55
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Stockholders' Meetings:
Annual, 1925, November 25 44–50
Special, 1924, December 8 41–43

The index may be set up, if desired, on a chronological basis so that the page numbers will be in sequence from top to bottom of the index column.

The first page of the minute book may carry an **identification,** as shown below:

THE UNDERSIGNED, being all of the original subscribers to the capital stock of The Blank Corporation, for the purpose of the adoption and identification of these records (or, the records contained in the following pages, or, this book and the records contained therein) as the original records of the said corporation, have hereunto subscribed our respective names and caused the corporate seal of the said corporation to be affixed this ..... day of ....., A. D. 19..

{ CORPORATE SEAL }

.....
.....
.....
.....
.....

Articles of Incorporation Copied In.—The articles of incorporation are copied on the minute book pages immediately upon their return from the office of the Secretary of State bearing evidence of their proper filing therein, or upon receipt of the "certificate of incorporation" or other evidence that they have been so filed. Such evidences of recording are also shown, by copy or notation, in the minute book. This is true also of the evidence—such as by document number, book and page—that the articles were also filed for record in the office of the proper officer, usually the recorder, of the county in which the corporation has its principal place of business.

By-Laws.—The by-laws may be **authenticated by a certificate** as shown below:

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, being all of the members of the Board of Directors of The Blank Corporation, and the secretary thereof, do hereby certify that the foregoing (or following) by-laws, as the same appear upon pages 23 to 39, inclusive, of this Minute Book, were duly adopted as the by-laws of the said corporation on the ....., day of ....., A. D. 19.., and that the same do now constitute the by-laws of the said corporation.

Being All of the Directors of
The Blank Corporation

{
.....
.....
.....
.....
}

{ CORPORATE SEAL }

.....
Secretary of The Blank Corporation

DIRECTORS' MEETINGS.—The secretary's duties in connection with directors' meetings are the same as sketched with reference to stockholders' meetings. As to each meeting, they begin with the giving of notice. This, however, is not always necessary for directors' meetings. The by-laws may provide for the first meeting of the **newly elected (or re-elected) board of directors** to convene without notice immediately following the adjournment of the stockholders' meeting at which they were elected (or re-elected). Or there may be the by-law provision that the members of the board of directors whenever they are literally "then and there present" as to their entire number, may hold a meeting without notice or waiver of notice, the fact of their presence removing the necessity for either. Waivers of notice of directors' meetings involve less

ormality than those necessary for stockholders' meetings. Notices given ersonally or by telephone are frequently provided for and commonly employed.

Meetings of the board of directors, upon notice, or waiver of notice, or without otice, are held at such times or after such intervals as circumstances and onditions require. Such meetings, except that of a newly elected board, re almost automatically organized when they convene; and the order of usiness usually covers the reading, and action upon by approval or correction, f the minutes of the preceding meeting, the consideration of and action upon nfinished business, new business, and adjournment. Directors' meetings may e continued from day to day, upon motions of adjournment to a stated hour nd place; or adjournment may be taken to a day and hour several weeks or a nonth hence. When the **election of officers** is one of the matters of business o be transacted there is usually less formality than in elections at stockholders' neetings. Action is taken upon **motions** duly made, seconded and voted upon; nd by way of **resolutions** presented and read and thereafter adopted upon notions duly made, seconded and carried to the effect that they be adopted. Among the principal matters which it is usual to handle by way of resolutions re the following:

1. All matters of more than ordinary significance, such as marked changes of business policy, extensions of facilities, etc.
2. Appointments of committees, special officers and agents, including designation of their duties.
3. Approvals of reports.
4. Authorization of special acts to be performed in future.
5. Bank accounts, and the handling of the same.
6. Calls of meetings (of the stockholders for all purposes requiring a vote by more than an ordinary majority of the voting shares).
7. Employment of counsel and auditors.
8. Expenditures for purposes outside of the regular course of business.
9. Issues of stock, particularly when any equivalent of money allowed by the statute is accepted in payment thereof.
10. Lost certificates, including the issuing of duplicates and the terms and conditions of such bonds as may be required upon the same.
11. Ratifications of acts performed by committees, officers or others acting under instructions—including the making and filing of reports, affidavits, returns, schedules, etc., as hereinbefore referred to.

MINUTES OF DIRECTORS' MEETINGS.—The essentials of minutes f directors' meetings are the statements in successive order of:

(A) The fact of the meeting, i.e., that it "was held."
(B) The place, hour, day and date.
(C) The notice or its equivalent, i.e., that it was held:
  (1) Without notice, pursuant to a by-law provision, (a) when immediately following the adjournment of the annual meeting, or (b) when all the members of the board were "then and there present in person"; or
  (2) Without further notice (notice or its equivalent previously existing), (a) when resumed pursuant to, and at the place, hour and day stated in, a resolution of adjournment adopted at a previous meeting; or
  (3) Pursuant to waiver of notice: (a) when notice was waived by all of the members of the board, or (b) when notice was waived (in writing signed before the hour of the meeting) by those

members of the board (necessarily a minority of the whole number) not present; or

(4) Pursuant to notice given: (a) personally, or (b) by telegraph, or (c) in writing (by mail or delivery in hand);

(D) The competency of the meeting to transact business, i.e.:

(1) How many (and who) were present in person, and

(2) How many (and who) were absent.

(E) The business transacted:

(1) By votes upon motions made and seconded upon the matter to be acted upon; and/or

(2) By votes upon motions made and seconded upon the adoption (or rejection) of a resolution proposed concerning the matter to be acted upon; and/or

(3) By order or decision of the presiding officer made or given "in the absence of objection."

(F) Adjournment:

(1) Upon a motion to adjourn **sine die; or**

(2) Upon the adoption of a resolution to adjourn to a stated hour and day and a designated place.

MINUTES OF A MEETING
OF THE BOARD OF DIRECTORS OF
THE BLANK CORPORATION

NOVEMBER 25, 1925

The Board of Directors of The Blank Corporation held a meeting on Wednesday, November 25, 1925, at four o'clock P. M., pursuant to the by-law provision (Sec. 7 of Art. III) for meetings of the Board of Directors immediately following adjournment of the annual meeting of the stockholders (or, pursuant to waiver of notice—in which case the original signed waiver should appear in the minutes—or, pursuant to adjournment of the meeting of October 18, 1925, or pursuant to notice given as provided by the by-laws). Four of the directors were present; ..... was absent.

The meeting was called to order by ....., who upon a motion duly made, seconded and carried, was elected chairman. He appointed ...., secretary of the meeting, which then proceeded to the election of officers. ....., ..., and ..... were nominated, respectively, for the offices of president, secretary and treasurer. A motion was then duly made and seconded that the nominations be closed, and that the secretary of the meeting be instructed to cast the unanimous ballot of the directors present for the nominees. This motion was put to vote and unanimously carried, whereupon the chairman declared the persons above named duly elected.

The following resolution was then proposed by ..... and its adoption moved by .....:

"BE IT RESOLVED, that the meeting adjourn to be resumed at the same place at ten o'clock A. M. on Thursday, November 26, 1925."

The motion of ..... that this resolution be adopted was duly seconded and unanimously carried, and the meeting thereupon adjourned.

The foregoing minutes and all of the acts of the Board of Directors as therein set forth are hereby approved.

.....
.....
.....
.....
.....

All of the members of the Board of Directors of The Blank Corporation.

AUTHENTICATION OF DIRECTORS' MINUTES.—The secretary secures, whenever possible, the signatures of all of the directors to the minutes of the meetings as they appear, approved or corrected, in the minute book. Sometimes the by-laws provide that a director who was not present at a meeting of the board of directors at which a proper quorum was present, may sign the minutes of that meeting and by so signing give them, and the acts of which they are the record, the same force and effect in so far as he, the absent director thus signing his name, may be concerned as if he had been present. In other words, an estoppel may be created in this manner; and under the particular circumstances of a sensitive situation it may be the secretary's duty to secure such an estoppel. When the meeting of the board of directors was properly called—as by notice given or otherwise as hereinbefore outlined—and when it was properly held, i.e., with a quorum present, the minutes of the meeting as they subsequently appear in the minute book are sufficiently authenticated by the signatures of those who were present. Thus the minutes may be signed by the secretary and a formal authentication, signed by all who were present, subjoined, as follows:

We, the undersigned, being all of the directors of The Blank Corporation, having read the foregoing minutes of the meeting of the Board of Directors of the said corporation (as they appear on pages .... to .... of the Minute Book) do hereby ratify, confirm and approve all that occurred at the said meeting as in the said minutes set forth.

Witness our signatures and seals this ..... day of November, A. D. 1925.

All of the directors of The Blank Corporation.

.....[SEAL]
.....[SEAL]
.....[SEAL]
.....[SEAL]
.....[SEAL]

The foregoing outlines procedure which cannot subsequently be questioned by any director. But for ordinary purposes minutes need be signed only by the chairman and attested by the secretary.

INSPECTION OF BOOKS.—The statutes of many states provide for the inspection and examination by stockholders of certain books of the corporation. The **stockholders' rights** in this respect are variously limited as to the number and kind of books that may be inspected, the purposes for which and the hours during which the examination may be made, and the identity of the persons exercising the privilege. The secretary, since he is the corporate officer who is in closest contact with the persons having such right of inspection and has the custody of the principal books and record which are subjected thereto, familiarizes himself with the relevant statutory requirements in this connection.

BY-LAWS—SECRETARY'S KNOWLEDGE OF.—The corporate by-laws enter into the secretarial function by way of the fact that the secretary is not only their custodian in the physical sense, but is also supposed to know what they contain and how their various provisions—and all amendments of the same —are or may be applicable to the different situations arising from time to time. A number of states have special provisions for the **posting of by-laws** or for keeping them in a book which shall be available for inspection by stockholders.

Duties of Secretary to Third Persons

The secretary's duty regarding reports, statements, schedules, certificates, affidavits, etc., required to be filed is to affix the corporate seal, sometimes accompanied by the attestation of his signature as secretary—this being in order that the official bodies may rely upon the document as evidence of the

fact that the corporation complied with the law. In the same sense, the secretary has the duty of attesting and affixing the corporate seal to certain **contracts of the corporation,** thus conveying to the contracting parties of the other part the knowledge that the execution of the agreement was in fact the act of the corporation as the party of the one part, and enabling them to rely upon it as such.

With the same effect and for the same purpose, he certifies to resolutions adopted by either the board of directors or the stockholders. An example is the **bank resolution,** which, unless the bank prefers its own form, may be as follows:

I, ..., hereby certify that I am the secretary of The Blank Corporation, a corporation organized and existing under the laws of the State of .....; and that at a duly convened meeting of the board of directors of the said corporation held on the 26th day of November, 1925, the following resolution was adopted:

"Be It Resolved, that the treasurer of The Blank Corporation be, and he hereby is, authorized and instructed to establish and maintain in and with the ..... Bank, of Chicago, Illinois, a bank account for, on behalf and in the name of the said corporation, and to deposit therein all or any of the funds thereof coming into his possession; and

"Be It Further Resolved, that, until further or otherwise ordered, the said ..... Bank be, and it hereby is, authorized, empowered and instructed to pay out such funds so deposited, upon and according to the check of The Blank Corporation signed by ....., the treasurer and countersigned by ....., the president thereof."

I further certify that the said resolution is still in full force and effect and has never been repealed; and that ..... and ..... are, respectively, the president and the treasurer of the said corporation.

In Witness Whereof, I have hereunto set my hand and seal and the seal of the said corporation this 26th day of November, 1925.

.....[SEAL]
Secretary of The Blank Corporation

{ CORPORATE SEAL }

The foregoing is representative and illustrative of both the secretary's duty of certification, which is accomplished by his own act as an expression of the function of his office, and his duty of attestation, which is the thing done by the impression of the corporate seal in association with his signature as secretary. Contracts often require a certification to support the attestation, by way of the statement upon oath that the secretary was authorized by the board of directors to affix the seal to the instrument in question, and that the president (or other officer, when such is the case) was the duly authorized officer or representative of the corporation to execute the contract by signing the corporate name thereto, by himself in that capacity.

Other Corporate Matters

THE CORPORATION CALENDAR.—As a reminder of those formal matters of corporate concern that must be attended to on certain dates, the secretary prepares and carries forward a book, or card, or card index of memoranda, chronologically arranged, relating to the filing of reports and returns to governmental bodies, notices of stockholders' and directors' meetings, and those other matters of relations to the law, the stockholders, and the business wherein time is of the essence of the performance. This is known as the "corporation calendar." In general form it is as follows:

CORPORATION CALENDAR

FISCAL AND CALENDAR YEAR 1925

JANUARY:
6th – Annual report due (for state of incorporation) first Tuesday.
21st – Directors' meeting—adjourned from December 3, 1924, (without further notice).

FEBRUARY:
12th – Notice of Directors' meeting, 18th.
18th – Directors' meeting.
21st – Prepare and mail annual report (for state where licensed as a foreign corporation) due before March 1st under penalty for failure to file.
28th – Last day to mail annual report.

MARCH:
4th – Close transfer books.
5th – Arrange extension (if necessary) for income tax return for 1924.
14th – Mail notices of annual meeting of stockholders. Prepare statutory list of stockholders.
16th – Last day to file United States return of income for 1924 (unless extension granted). First instalment of tax due.
Last day to file ..... state income tax for 1924.
25th – Annual meeting of stockholders.
Meeting of board of directors (election of officers).

APRIL:
1st – File schedule of property with assessors.
10th – Mail call ordered by directors for last instalment of subscriptions of increased common stock voted October 8th, 1924.
20th – Check assessment of franchise tax (in state where licensed as foreign corporation) on the basis of proportion of capital (or capital stock) employed.
24th – Notice of directors' meeting, 28th.
28th – Directors' meeting.

MAY:
20th – Notice of directors' meeting, 26th.
26th – Directors' meeting.

JUNE:
1st – File capital stock report with Tax Commission.
15th – Second instalment of United States income tax due.
17th – Notice of directors' meeting, 23rd.
23rd – Directors' meeting.

JULY:
1st – Prepare and file United States capital stock tax return during July.
Pay state franchise taxes during July.
22nd – Notice of directors' meeting, 28th.
28th – Directors' meeting.
31st – Last day to file United States capital stock tax return.
Last day to pay state franchise taxes without penalty.

The corporation calendar may include memoranda concerning matters of business as well as the performance of specific acts required by law. Careful preparation of this calendar will assist in translating the secretarial function into that degree of tangibility that it deserves.

THE SECRETARY'S FILES.—All **corporate documents and instruments** that require to be filed for record and thereafter are returned bearing the indicia of recording, are filed by the secretary so as to be available for quick reference. This class of corporate documents and instruments includes the articles of incorporation, the certificate of incorporation, or such other evidences of the filing of the articles in the office of the Secretary of State as may be

provided, certificates of admission or license to transact business in other states, certificates of amendments of the articles of incorporation, deeds, mortgage indentures, etc.

Likewise, the secretary preserves all those **originals of oaths of office,** such as inspectors' oaths, that are subscribed in writing, all **resignations** of directors and officers, all **reports** submitted at meetings, his own affidavit of mailing of notices, certificates of publication of notices, signed **waivers,** and other documents of original significance, sometimes including even paid notes and bond interest coupons. The secretary also preserves copies of all notices, copies of all contracts whereby the corporation is bound (particularly those which by his attestation he certifies to be corporate acts), copies of all resolutions of the board of directors or stockholders which he certifies to be true and correct, and copies of all reports, schedules, statements, certificates, affidavits, returns, applications, answers to interrogatories, and other formal documents filed or submitted in compliance with the statutes.

DIRECTORS—THEIR POWERS AND FUNCTIONS.—On the border line of the secretary's contacts with custom and usage, with the other officers, and with counsel, there are many matters which, under certain circumstances, become identified with the secretarial function. The secretary's appreciation of this adaptability of his duties leads him to become familiar with the following.

Neither stockholders nor directors have any individual power as such; they express their acts in meetings, and cannot act in any other way than by meetings. Directors' meetings are made up of persons, i.e., the required number of directors must be present in person or there is no meeting. Directors cannot be present at meetings of the board of directors in any other way than in person; they cannot be represented at such meetings by proxy. It is possible for a minority of the board of directors to act on numerous matters, as, for example, when a bare quorum of the members of the board—such as four out of a board of seven—are present at a meeting, and a motion is carried or a resolution adopted by a favorable vote of three of the four present. The directors, acting as a board, have complete authority to manage and conduct the business. It is within the duty of the secretary to satisfy himself that every contract and instrument which he is to attest, or impress with the corporate seal, has the definite and certain authorization of the board of directors.

WHEN RESIGNATIONS BECOME EFFECTIVE.—Resignations of directors or officers usually do not need to be formally accepted in order to relieve the resigning director or officer from responsibility. When the annual meeting is not held on the day designated in the by-laws, the directors hold over until their successors are duly elected and qualified—usually at the next stockholders' meeting.

SECTION 23

BANKS AND THEIR USES

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SECTION 23

BANKS AND THEIR USES

This section relates to the various uses financial executives of business concerns may make of the different types of financial institutions. Foremost among them are the commercial banks. Detailed description is given of the facilities they offer for receiving, transferring and paying out funds, as well as the various forms of loans, discounts and other services such institutions place at the disposal of their customers. Next in importance comes the open-market borrowing through commercial paper houses and discount companies. The facilities offered by the various types of finance companies are then discussed.

Commercial Banks

BENEFITS TO CUSTOMERS.—The most common services of commercial banks are:

1. Collecting checks, drafts, notes, coupons, etc.
2. Paying checks drawn by customers.
3. Safekeeping current funds.
4. Lending money and extending credit.
5. Transferring funds, domestic and foreign.
6. Dispensing credit information.
7. Safekeeping securities.
8. Acting as custodian of trust funds and escrows.
9. Acting as trustee, executor, administrator, guardian, etc.

BANKS' INTEREST IN SUCCESS OF CUSTOMERS.—The customers of banks should cultivate close relations with their bankers and consult them freely on financial phases of their business. Bankers are interested in the success of their customers and for reasons of self-interest are ready **to extend advice and proper assistance** wherever possible. The growth and success of enterprises, primarily of interest to their owners, are also of interest to the bankers because they bring increased banking business. In many cases financial mistakes and difficulties could have been avoided by business men if in the early stages these troubles had been discussed with their bankers.

The officers of some banks go to extraordinary lengths to serve their customers. Customers who never call upon their bankers for advice and service, even though it appears to be remote from banking functions, fail to make use of a valuable asset.

The **compensation of banks** for the services they render their customers in providing a cheap and convenient means of transacting financial business is obtained largely through the use of part of the money the customers have on deposit. Loans are made from these funds and the interest received constitutes the principal source of the bank's revenue.

Usually the **relation of the bank and customer** is that of **debtor and creditor**, but when the customer borrows, the position is reversed. At times the relation of **principal and agent** prevails, particularly when the bank undertakes to collect negotiable instruments for its clients.

BENEFITS IN GENERAL.—Banks serve the community in general as media for a more efficient **distribution of its surplus funds.** They receive the funds of persons who cannot use them, keep them in safe places, and pay interest for them. They lend these funds at higher rates of interest to those who can employ them profitably. The borrowers gain by having funds available at the market rate of interest and the banks make a profit on these loans. The community in general gains by having idle funds placed in the hands of those who can use them in commercial transactions.

The Depositor and the Bank

DEPOSITOR'S OBLIGATION TO THE BANK.—**A depositor's first obligation** to his bank is to maintain a balance sufficiently large to enable the bank to lend part of it and make some profit over the cost of handling the account. **Active accounts** should have larger balances than inactive accounts. An active account is one on which many checks are drawn and for which numerous items are deposited for collection.

Some banks make a small **monthly service charge** for carrying accounts of depositors with small balances. Where a depositor cannot maintain the minimum balance required by the bank, which is governed generally by the size of the bank, he cannot reasonably object to a small charge for bank services.

DEPOSITS.—Generally, the **first step in establishing banking relations** is the making of a deposit, which serves as the basis for other operations. In the performance of this function the bank receives cash or its generally accepted equivalent, and extends the right of withdrawal at sight or on notice, depending on the nature of the account.

To attract funds, banks encourage opening accounts and making deposits. The bank takes the signature of the new customer for its signature file. Subsequently signatures on checks are compared with these to determine the genuineness. References are sometimes required of new depositors. Banks are jealous of their reputation since they are **judged by their customers.** A depositor of poor business character harms the bank's good name, and by depositing uncollectible items or overdrawing his account, causes loss and expense. City banks often require a **minimum initial deposit** to eliminate small, unprofitable accounts. Competition reduces the severity of these requirements and causes many exceptions to be made.

Banks furnish **passbooks,** in which tellers receipt for deposits, and blank check books. At intervals, generally each month, a **statement of deposits received and checks paid,** together with canceled checks, is mailed to the customers. In many banks in place of such periodic statements, customers may leave passbooks for balancing and return of canceled checks. In **savings accounts** each deposit and each withdrawal is entered in customer's passbook as made and their balances are extended. No statement is required.

COLLECTIONS.—One of the most important functions of commercial banks is to make collections for depositors on checks, drafts, promissory notes, coupons, etc., which are payable through other banks, and other agencies. The term **collection item,** carefully used, means an item which will not be credited to the **owner's** account until the actual funds are in the possession of the bank

ncluded in this class are drafts requiring acceptance and other papers on which he bank considers final payment a matter of uncertainty. The term is also ıed for items on which immediate credit has been given the depositor, or which elong to the bank and require special attention in securing payment; notice ıust be sent or a messenger call on the payer. Checks drawn on non-clearing ıouse banks may be so classified.

City collections is a term used to describe instruments drawn on other banks r agencies in the same city which are collected by the bank by messengers or hrough the local clearing house. **Out-of-town collections** is a term usually used o describe instruments drawn on banks or other agencies outside the drawer's ity. Funds are obtained on out-of-town collections by depositing the items vith a local Federal Reserve bank for collection, or by sending the items to one of the bank's own agents, or a correspondent bank for credit or for remittance.

"Foreign collections" is a term applied to items payable abroad or those eceived from abroad but payable in this country for the account of customers of the bank.

Commercial banks also collect **notes, acceptances, coupons,** etc. The banks ıold such notes until they are due. If they are payable outside the city they ıre collected through the banks' representatives, generally correspondent banks n the debtors' city. Notes payable within the city are collected by special nessengers, or through the clearing house. After collection has been made the wners' accounts are credited, unless other arrangements have been made.

PAYMENTS.—A bank pays the checks drawn on it by its depositors, and or their convenience will also pay checks drawn on other banks. An adequate upply of currency is required to pay checks so presented, to settle clearing ıouse balances and maintain the reserve required by law. At times it is neces- ary to make shipments of cash to settle balances with banks in other cities.

INTEREST ON DEPOSITS.—On savings accounts banks pay interest, usu- lly from 3 to 4% per annum. In cities where competition is keen, interest is aid by commercial banks on balances in checking accounts. The practice f paying such interest varies widely. Some pay interest on an average daily alance of over $500; others on $5,000, or over. The rate of interest is gov- rned by financial conditions, and is generally about 2%.

Financial managers should inform themselves regarding the practice of banks n their localities. Frequently banks which pay interest are as strong or stronger han banks which pay no interest or pay interest at lower rates. As a rule no nterest is paid to customers who are also borrowers, but in such cases interest s paid as soon as borrowing stops if balances are above the minimum require- nents.

The rate paid depositors who have checking accounts is determined by several actors, such as local competition, the condition of the money market, the urrent rate of interest, the desirability of the account, the influence the depositor as with the bank, the activity of the account and the amount of balances arried. **In New York** and in some other cities the rate of interest paid on bal- nces of checking accounts is largely determined by the clearing house, which ets a maximum rate of interest the member banks may pay on such accounts.

TIME DEPOSITS.—Time deposits are those which remain on deposit with he bank for a specified time, as agreed between the bank and depositor. There re **two methods** of handling such deposits. The bank may issue to the depositor **certificate of deposit** which is payable on a certain date, or the depositor may gree **to give the bank certain notice,** generally 30 days, before he withdraws is funds. Banks allow a higher rate of interest on time deposits because such

deposits enable them to fix maturity dates on loans, and because the **legal reserve required** on such deposits is less than on demand deposits.

RECONCILIATION OF BANK ACCOUNTS.—Most banks send to depositors monthly statements of the condition of their accounts. Depositors should reconcile these statements or balances, by carefully checking for errors or improper charges. This important duty they owe to themselves as well as to the banks. If a depositor fails to make such reconciliation after a bank has repeatedly sent him statements of his account, and if subsequently irregularities are disclosed, which could have been discovered and avoided by prompt reconciliations, it is probable that the courts would find that the **negligence of the depositor was a primary, or at least a contributory, cause of the irregularity,** and that therefore he must suffer the loss occasioned by the irregularity. If there be no negligence on the part of the depositor, the bank, as a general rule, must bear the loss caused by irregularities.

There are **two methods of reconciling the monthly statements** with the balances shown by the depositor's cash book or check book. The one starts with the bank statement as a basis, and the other starts with the depositor's cash or check book balance as a basis. Both methods are similar, differing only in the basis taken. They are illustrated as follows:

First Method

American Trust Co., December 31, 19—			
Balance per statement			$68,317.92
Add—Note of Albany Manufacturing Co. protested, now returned, including $2.55 fees			252.55
Deposit of December 31 not credited by trust company			1,892.00
Collection charges for December not entered in cash book			6.20
			$70,468.67
Less—Interest credited by bank not entered in cash book		$ 93.10	
Checks outstanding:			
6319	$ 50.00		
6682	125.00		
6714	73.10		
6716	139.45		
6717	68.25		
6718	1,000.00	1,455.80	1,548.90
Balance per cash book			$68,919.77

Second Method

Balance as per cash book			$68,919.77
Add—Checks outstanding:			
6319	$ 50.00		
6682	125.00		
6714	73.10		
6716	139.45		
6717	68.25		
6718	1,000.00	$1,455.80	
Interest credited by bank not entered in cash book		93.10	1,548.90
			$70,468.67

Less—Note of Albany Manufacturing Co. protested, now returned, including $2.55 fees	$ 252.55	
Deposit of December 31, not credited by trust company	1,892.00	
Collection charges for December	6.20	2,150.75
Balance as per bank statement of December 31		$68,317.92

Borrowing from Banks

BANKS' DESIRE TO LEND MONEY.—The **principal source of income** of banks is derived from the lending of money and credit. Where they can do so safely and at a fair rate, the banks are just as anxious to lend money as customers are to borrow it. When a customer's business needs additional funds for limited periods, he naturally and properly seeks loans from his bank, to the mutual profit of both.

Modern business is largely financed for current requirements by the aid of credit facilities of banks because of their economy and adaptability. The primary feature of borrowed funds is their **economy.** A loan is negotiated for the period for which it is required, at rates of interest prevailing at the time, and its use, under ordinary circumstances, should net the borrower a profit above the cost of the loan. Bank loans can be negotiated in such amounts as may be required from time to time, and the maturity dates can be adjusted so that they will fall at times when funds are likely to be available for repayment.

NEED OF BORROWING.—In practically every business there are certain times, usually certain seasons, when more money is required than the average well-managed concern has available. At such times the necessary **additional funds** can usually be obtained from banks in the form of loans.

The two principal reasons for **borrowing on short-term** rather than on long-term credit are, first, that commercial banks make the majority of their loans on short-term obligations, since this type of loan insures the **liquidity of their assets;** second, that **seasonal fluctuations and variations** in the need for funds often necessitate borrowing to carry a business over peak expenditures. Funds so borrowed may be repaid as soon as the peak has been passed.

USES OF BANK LOANS.—The most common uses to which borrowed funds are put are the following:

1. **To take cash discounts on purchases.** The cost of bank loans is generally less than the cost of trade credit. It is a good financial policy to pay 6% to the commercial banker in order to obtain a discount of a higher rate on purchases. The subjoined tables show the commonly used discount rates and their equivalent interest rates.

½%	10	days—net	30	days	=	9%	per	annum
1%	10	"	"	30	"	= 18%	"	"
1½%	10	"	"	30	"	= 27%	"	"
2%	30	"	"	4	mos.	= 8%	"	"
2%	10	"	"	60	days	= 14%	"	"
2%	30	"	"	60	"	= 24%	"	"
2%	10	"	"	30	"	= 36%	"	"
2%	40	"	"	60	"	= 36%	"	"
2%	70	"	"	90	"	= 36%	"	"

2%	10, 30X days—net	60 days	=	36%	per	annum
2%	10, 60X "	" 90 "	=	36%	"	"
3%	10 days—net	4 mos.	=	10%	per	annum
3%	30 "	" 60 days	=	36%	"	"
3%	10 "	" 30 "	=	54%	"	"
4%	10 "	" 4 mos.	=	13%	"	"
4%	10 "	" 60 days	=	29%	"	"
5%	10 "	" 4 mos.	=	16%	"	"
5%	10 "	" 60 days	=	36%	"	"
5%	10 "	" 30 "	=	90%	"	"
6%	10 "	" 4 mos.	=	20%	"	"
6%	10 "	" 60 days	=	43%	"	"
7%	10 "	" 4 mos.	=	23%	"	"
8%	10 "	" 4 "	=	26%	"	"

2. **To add to inventories.** When goods are unusually cheap and there is no danger of their physical deterioration, it is often desirable **to lay in large stocks at low figures.** Furthermore, it is usually necessary to carry larger inventories during periods of peak operation than during periods of normal operation. The use of bank loans to carry inventories over the busy periods is perfectly proper as they are normally self-liquidating. Borrowed money, however, should not be tied up in inventories indefinitely.

3. **To facilitate extension of short-term credits to customers.** It is good business policy, as well as a necessary one, to extend to customers credit on goods purchased. The capital necessary, when accounts receivable are above normal, may be borrowed from the bank and the cost thereof included in the selling price of the goods.

4. **To furnish permanent working capital.** Loans made by commercial banks to businesses are supposed to be **self-liquidating and temporary.** In practice, however, short-term loans are often continually renewed so that banks in reality are furnishing **permanent working capital.** As long as the current assets are liquid and the bank loans properly safeguarded, this practice may not be a dangerous one. But banks usually expect that loans will be used to **finance seasonal or peak requirements,** and that they will be entirely paid up at least once a year. One of the most frequent causes of mercantile failures is the calling of bank loans which have run over several renewals.

5. **For fixed capital purposes.** While short-term loans are supposed to be for working capital purposes only, bankers will sometimes advance money for use in the **purchase or construction of capital assets.** Such loans must be continually renewed until the business is able to repay them out of profits, or by issues of securities. This procedure may be economical for the borrower when long-time security interest rates are high, but appear to be due for a decline. In such cases it is not wise to mortgage fixed assets at high rates for long terms. This practice, however, is fraught with danger and should not be resorted to except in emergency, and then only if the bankers are fully informed regarding the disposition of the funds and if they specifically consent to future renewals.

THE LINE OF CREDIT.—Financial managers should **arrange in advance** for adequate bank loans. No expansion should be made without knowledge of the amount of money required, its source and availability. Conservative managers also usually arrange for bank credits in excess of minimum requirements. When a show of independence can be made, bankers are much more amenable to requests for loans. Usually the greater the need of the borrower, the more

difficult it becomes to borrow money. Often the promises of bankers are modified for good reasons or for none at all.

A concern the finances and general credit condition of which have been found satisfactory upon examination by the bank, may be granted either a single loan or a "line of credit." The latter term simply means that the concern is permitted to draw upon the bank at any time for sums up to a specified amount upon proper notice being given. Financial managers thus arrange in advance for loan accommodations, using such amounts as their business demands and usually giving notes for each loan as it is taken, until the limit of the "line" has been reached.

Amount of Credit Line.—The credit line of a borrower should be substantially in **excess of the maximum amount** that he expects he will require. The cash balance requirement sometimes keeps borrowers from protecting themselves in this way, but it should be remembered that a deposit which secures a line of credit is in reality insuring the future borrowing power of the business. Credit lines should be established well in advance of the time when they will actually be utilized.

Agreement under the Line of Credit.—Banks make certain stipulations in granting a line of credit. The borrower must keep the bank informed as to his financial condition, any material change in which justifies the bank in making corresponding changes in the extent of the line. Moreover, the condition of the bank's resources or of general business may necessitate changes. Each separate application for a loan within the line is carefully examined by the bank, at times almost as thoroughly as in establishing the line.

Keeping the Line of Credit Open.—In order to keep his line of credit "open" the borrower usually is required to maintain on deposit with the bank a certain percentage of the amount borrowed. In any specific instance the borrower's account would be credited with the full amount of the loan, less the discount charged by the bank. He would have free use, however, of only a part of this amount, the remainder being considered by the bank as a reserve, the use of which augments the bank's profits.

In such cases, therefore, borrowers pay more than the nominal rate of interest, since they pay interest on the full amount of their loans but are allowed to use only a part thereof. The percentage required as a reserve is variable, depending largely upon the negotiations between the bank and the borrower. The **usual requirement** is 20%, but it may range from 10 to 25%, depending upon the condition of the money market and the credit standing of the borrower. Banking practice differs widely in this respect. In a few instances the bank may require no reserve, merely stipulating that the balance be restored as the borrower finds it convenient. Some banks require the full percentage of the entire line to be maintained continually, whether the full line is being utilized or not. Others demand as a deposit a percentage of the sums actually borrowed, regardless of the amount of the line, and thus require no deposit when the line is not being used.

Interest on Balances.—The same diversity of practice characterizes the **payment of interest by banks** upon the deposit balances. Some refuse flatly to do so. With the recent increase in the number of banks and of competition between them, a customer of good standing, even though he is a borrower, can usually secure such interest. Ordinarily, about 2% is paid, though there is no fixed rate.

PERIODICAL CLEAN UP.—Borrowers must make **fairly regular use of their lines of credit** if they would have them remain "open." At the same time the banks look for periodical "clean ups," **at intervals of about a year,** of all of

the borrowers' obligations. Borrowers should be out of debt to the banks for reasonable lengths of time during each year, not only to indicate the financial soundness of their businesses, but to help the banks keep their assets liquid. No definite rule can be applied as to the frequency of the periodic clean-up. It must depend largely upon the **type of business** and the **rapidity of the turnover.** Concerns with a quick turnover should clean up their loans quarterly or semi-annually. An annual repayment probably will be found sufficient where the turnover is slow. In any event, some regular clean-up is necessary, if only as an indication that the borrower is not using the funds of the bank for fixed capital purposes.

E. E. Lincoln in his "Applied Business Finance" says:

"Of course, there are probably exceptional cases when a new and rapidly growing business might find it extremely difficult to pay off all its loans annually. This is due to the fact that as the business expands, working capital is needed more urgently than it can be supplied by the business itself through re-invested earnings. In such cases, however, the borrower should be carefully watched, for it may be that he is attempting to do an unsafe amount of business on too small margin of the owner's capital. The bank may be unwittingly becoming a permanent partner in a concern whose rapid expansion is decreasing the equity of the owners themselves. This is a very dangerous situation. In periods of rapidly rising prices it is also difficult for the borrower to pay off his bank obligations, since he constantly needs more working capital to carry on the same volume of business as before, because of the increased prices. Here again the borrower should be watched, as he is in great danger of recklessly overexpanding.

"The safest rule to follow, therefore, is for the banker to **insist** upon at least an annual 'clean-up' of loans, irrespective of the nature or age of the business. Such a conservative policy will in the long run reduce failures and prevent many serious involvements."

The use of the line of credit, therefore, is usually confined to those concerns whose need for additional working capital is periodic and temporary. A business which is continually in need of more working capital and is not subject to seasonal fluctuations should not make use of the line of credit.

DIVERSIFIED BORROWING.—The restriction placed by law upon national banks that **loans to one borrower** may not exceed 10% of the bank's capital and surplus makes it necessary for financial managers of large concerns to establish **credit lines with several banks.** The business is then assured of adequate protection when it is in need of funds. The small business borrower whose needs can well be taken care of by one bank need not resort to opening accounts with several banks. It is better policy for him to do business entirely with one bank, follow carefully all of its requirements, and keep in good standing with its officers. In return he may generally be assured of ample protection and assistance in times of financial stress.

FORMS OF BORROWING.—In general there are two forms of borrowing, long-term and short-term. **Long-term borrowing** is usually done by means of obligations running from five to twenty years or more. Such loans are generally obtained by issuing bonds. **Short-term borrowing** is usually done by means of notes, acceptances and commercial paper. Short-term notes are divided into three classes:

1. Notes to trade creditors.
2. Notes discounted at banks.
3. Notes sold to the public.

This section deals primarily with the obtaining of loans through the issue of such notes.

A loan is simply an advance of funds, and in banking consists of banking credit for which the borrower agrees to pay interest, either at certain stated intervals or at the time of the maturity of the loan. **Banking loans** are of two kinds, **secured and unsecured**: they are secured if they have **securities pledged** against them; unsecured if there be no such pledging. The term **loan** in almost all instances signifies a secured loan. In American banking practice the term **discount** generally signifies an unsecured loan. In the following discussion, however, the former term includes discounts.

CLASSIFICATION OF LOANS.—A borrower may obtain funds for current transactions in a variety of ways, which may be classified in this manner:

A. As to maturity:
1. Demand or call loans:
   (a) Direct loans on promissory notes
2. Time:
   (a) Discounted paper

B. As to obligation of parties:
1. Single-name paper—promissory notes
2. Double name:
   (a) Accommodation paper
   (b) Discounted notes of a customer (receivables)
   (c) Acceptances:
      (1) Bankers'
      (2) Trade

C. As to security:
1. Unsecured
2. Secured by collateral consisting of:
   (a) Listed securities
   (b) Unlisted securities
   (c) Bills of lading
   (d) Warehouse receipts
   (e) Trust receipts
   (f) Bills receivable
   (g) Accounts receivable
   (h) Chattels
   (i) Mortgages on real estate
   (j) Mortgages on farms
   (k) Other collateral

D. As to agency negotiating loan:
1. Banks
2. Commercial paper brokers or dealers
3. Finance companies, discount companies, etc.
4. Acceptance corporations
5. Other business firms
6. Individuals

E. As to use of proceeds:
1. Financing short-time operations in producing, purchasing, carrying, or marketing goods in one or more steps of the process of production, manufacture or distribution.

2. Carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the United States government.
3. Carrying or trading in bonds or notes of the United States government.
4. Consumptive purposes.

UNSECURED LOANS.—Unsecured or clean loans constitute a large majority of the loans made by banks to business borrowers. The borrower simply presents his promissory note to the bank to be discounted. There is no deposit of collateral with the bank, the only security being the integrity of the borrower and the financial strength of his business. The bank credits the borrower's account for the amount of the note, less the discount, for the time the note is to run.

From this procedure the term **discount** has come to apply in banking circles to **unsecured loans with a definite maturity date.** Sometimes a new account is opened by the entry of the proceeds of a discounted note, but, as a rule, banks require prospective borrowers to open an account prior to the discounting of a note. A **loan,** on the other hand, usually means a secured loan which runs for a certain length of time. On the "discount" the bank collects its charge in advance, while on the "loan" the charge is collected monthly or is not collected until the date of maturity when the entire obligation is liquidated.

Example: If $100,000 is obtained on "discount" and the note runs for 3 months at a rate of 6%, the bank advances the borrower $100,000 less the discount $1,500 (if 90 days), or $98,500. The exact number of days is computed. A note dated June 1, running 3 months is due September 1. The bank charges for 92 days including the last day but not the first. At the maturity of the note the borrower pays its face value, $100,000.

If the $100,000 is obtained on a "loan" and the note runs for 3 months at 6%, the borrower would receive $100,000 from the bank and return $101,500 at maturity. There are exceptions to both methods. The interest of loans may be collected in advance while the discount charge may be deferred until maturity.

WORKING FUNDS OBTAINED THROUGH UNSECURED LOANS.—Unsecured bank loans are the customary means of obtaining working funds in excess of a concern's minimum requirements, which should always be raised from permanent capital sources or by long-term loans. Businesses with sound credit will invariably choose to discount their own promissory notes, unless custom calls for the deposit of collateral, such as stocks, bonds, warehouse receipts, or similar documents, in any particular business or trade.

Unsecured loans are **used more commonly** than are secured loans for the following reasons:

1. Most businesses do not possess collateral which may be deposited in a bank as security.
2. Unsecured loans may be handled more easily than secured loans, since the clerical routine and expense connected with the caring for collateral is avoided.
3. Many businesses whose credit standing is good may arrange for unsecured loans as cheaply as for secured loans.

The **open-book account method** of conducting business in the United States has given rise to the banking practice of making unsecured loans. As a rule a seller of merchandise offers his goods on credit with a certain discount for cash payment within a few days. If the buyer does not take advantage of this discount he must be financed or carried by the seller until the obligation comes due and is payable. The seller in turn may have to borrow from his bank in

order to finance his accounts receivable. For such transactions the unsecured note is the most frequently used.

SECURED LOANS.—The aim of financial managers in getting working capital is to preserve a **strong credit position** and at the same time secure favorable interest rates. They will, therefore, **normally borrow** on straight, unsecured promissory notes. But if the credit of their companies has become weakened, or if it is necessary to obtain larger sums than the banks will lend without some security, they must frequently resort to **secured loans.**

A loan is secured when some **collateral** is left with the bank as a pledge, which may be sold by the bank if the borrower defaults. If the market value of the collateral declines, the borrower may be called upon to "remargin," that is, supply additional security. If he fails to do so, the loan becomes due and payable, and the bank can sell the security without notice. Any excess over the sum lent and the interest thereon is returned to the borrower. The bank may also apply toward payment of the loan any deposit maintained with it by the borrower.

TRANSFER OF TITLE TO PLEDGED PROPERTY.—When banks receive collateral as security for loans, they must be certain that they may obtain the legal title to the collateral in case the borrower defaults. **In Wall Street transactions,** for instance, the banks require that the securities be a good delivery under the rules of the New York Stock Exchange. If the borrower deposits securities which are drawn in his name, they must be indorsed in blank, or accompanied by power of attorney. Securities drawn to the order of some other person may be pledged if this other person will sign a certificate or agreement giving the borrower the right to pledge the property. This pledging is called **hypothecation.** This does not give the one in whose favor the hypothecation is made the beneficial title to the property, but merely gives him **the right to have it sold by legal process for the satisfaction of his claim in case of default.** Hypothecation is used in connection with stocks or bonds, bills of lading, warehouse receipts, insurance certificates, etc., which are evidences of property pledged to secure a debt or liability. The hypothecation certificate makes legal acknowledgment of the creditor's claim to the collateral. Hypothecation certificates are used to a large extent in financing foreign trade for the purpose of pledging bills of lading, insurance certificates, and similar shipping documents as collateral security for bills of exchange.

The following is a **typical collateral loan agreement** used for secured loans:

..... Dollars ..... 19..

On Demand, for value received, ... promise to pay to THE NATIONAL BANK of ..... or order, at its banking house ..... Dollars with interest at the rate of ..... per centum per annum, ... having deposited with said Bank, as Collateral security for payment of this or any other direct or indirect liability to said Bank, due or to become due, or that may hereafter be contracted .....

.....

In case of depreciation in the market value of the security hereby pledged, or which may hereafter be pledged for this loan ..... agree to furnish, on demand, satisfactory additional security, so that the market value thereof shall always be at least ..... per cent more than the amount of this note. And failing to deposit such additional security, this note shall be deemed to be due and payable forthwith, anything hereinbefore expressed to the contrary notwithstanding and the said Bank, or its assigns, may immediately reimburse itself by the sale of the security, as hereinafter authorized. And authority is hereby given to the said Bank, or to its assigns, to sell, assign and deliver the whole or any part of the said Collateral, also any security substituted therefor or added thereto, without notice or advertisement, either at public or private sale, at the option of the said Bank, or

its assigns, on the non-performance of this promise; any balance of the net proceeds of such sale remaining after paying all sums, whether then or thereafter payable, due from ..... to the said Bank on account of this note or otherwise, to be returned to ..... And it is further agreed that the said Bank, or its assigns, may bid and become purchasers of such sale, and no other purchaser shall be responsible for the application of the purchase money.

[Signature] .....
.....

STOCKS AND BONDS AS COLLATERAL FOR LOANS.—The market value of pledged securities must exceed the amount of the loan by a **margin** varying from 10 to 40%, in order that the banker may be amply protected in the event of market fluctuations. The kinds of stocks or bonds, and the stability of their market values, will determine the amounts which the bank will lend on them. Federal government bonds, for instance, may frequently be borrowed upon up to 90 or 95% of their full value; but larger margins are required for corporate securities, especially if they are of a speculative nature.

Other factors determining margin rates are:

1. **Nearness to maturity of a bond.** The chances of loss on bonds of a solvent company diminish as the maturity date of the bonds approaches.

2. **Marketability of the securities.** Those listed on the New York Stock Exchange are generally assured of a ready market and hence have more stable values than those listed on smaller exchanges or those not listed at all.

3. **Mixed collateral,** consisting of securities in different lines of business, distributes the risk of loss and is generally looked upon as better security than the stocks or bonds of one particular corporation or industry.

COMMODITY PAPER.—Negotiable instruments **secured by bills of lading and warehouse receipts** as collateral are generally known as commodity paper. The bulk of the grain, cotton and other commodity transactions are financed on the basis of such paper. The usual practice consists of issuing drafts or notes to which are attached bills of lading or warehouse receipts, and generally insurance policies covering the goods. In case of default the banks are empowered to take possession and sell the goods covered by the bills of lading or warehouse receipts, and apply the proceeds against the loans or advances made by the banker.

Better interest rates are usually allowed on loans secured by commodity paper than on unsecured loans. Dealers in staple products may be able to obtain better terms from banks by pledging their commodity paper as collateral for loans than dealers in seasonal or perishable commodities.

WAREHOUSE RECEIPTS AS COLLATERAL FOR LOANS.—A warehouse receipt is an acknowledgment of the warehouseman that he has received certain goods for storage which will be delivered in accordance with the terms set forth on the receipt. The Uniform Warehouse Receipt Act provides for negotiable and non-negotiable warehouse receipts. A **negotiable warehouse receipt** states that the goods will be delivered to the bearer, or to a designated person on his order. A **non-negotiable receipt** states that the goods covered by the receipt will be delivered only to the depositor or to a specified person named in the receipt.

The amount which banks will lend on such security depends on the nature of the commodities and the stability of prices of such goods. Bankers require a certain margin of safety, varying from 10% to 25% against the possibility of a drop in prices. Arrangements may be made to withdraw part of the goods covered by a warehouse receipt. Such withdrawals are generally endorsed on

he warehouse receipt. Arrangements may be made for **substitutions of one commodity for another** of equal value, or of one grade of a commodity for another rade of the same commodity, of equal value, as collateral for merchandise oans. In accepting new collateral in place of released items, the former is crutinized as carefully as was the latter when originally submitted.

BILLS OF LADING AS COLLATERAL FOR LOANS.—Bills of lading are ften used as security for temporary loans. The shipper of goods draws a raft on the buyer for the purchase price of the goods and discounts it with his wn bank. The security given is the bill of lading which the buyer must have n order to gain possession of the goods. When the bank sends the draft to the uyer he must either pay or accept it, and sign a trust receipt in order to secure he bill of lading. In such transactions the current financial condition of the arties is not of prime importance. The **real security** is the particular consignment of goods, while the borrowing is done, not as a means of raising more orking capital, but to receive in advance money from a definite short-term bligation.

There are two types of bills of lading, the straight bill of lading and the rder bill of lading. A **straight bill of lading** specifies that the merchandise is nsigned to a certain definite purchaser. It is **non-negotiable** and is not enerally acceptable for use as collateral. An **order bill of lading** states that he goods are consigned to the order of the person mentioned in the bill. It therefore **negotiable.** When banks discount drafts secured by bills of lading, hey always demand order bills of lading. If the draft is accompanied by a traight bill, the bank will receive the item for collection only and will not credit he customer's account until the funds have actually been collected.

The use of the bill of lading to finance transactions involving goods which re being transported to markets has become so general and widespread that ongress passed a Bill of Lading Act, effective January 1, 1917, which is esigned to prevent the use of drafts with bogus bills of lading attached and ther frauds. The Bill has brought about certain uniform practices in connection with bills of lading, has provided fines and punishments for fraudulent se, has made the carrier responsible instead of the bank, when the bank has ot been negligent, and has provided a uniform bill of lading which is safely egotiable.

TRUST RECEIPTS AS COLLATERAL FOR LOANS.—It may happen hat the borrower must **retain physical possession** of the goods on which he as been granted credit by a bank, as in the case of raw material which he ishes to manufacture into some salable article. The bank may, therefore, llow the goods to remain in his possession but will require of him a **trust eceipt** which is evidence that the title to the goods rests with the bank. The erchant, in this case, has the confidence of the bank, but not to the extent f an unsecured loan, for in the event of bankruptcy, the bank has a prior laim on the goods until the loan is paid, while with an unsecured loan the ank must share with other creditors. Goods released under a trust receipt hould be marked so that they can always be identified as the property of he bank.

Under trust receipts banks are empowered to take possession of the goods t any time. As a matter of practice, banks generally allow their customers onsiderable leeway in settling their obligations and do not assert their rights f possession unless such action is necessary by reason of financial embarrassment of the customers whose receipts they hold.

There are **inherent difficulties** connected with trust receipts which limit

their more general use. They are, however, used extensively in financing foreign trade. In order to protect their lien, lenders should be able to **identify at all times the goods** which are trusteed for their protection. When many lots of raw materials are converted in bulk, identification becomes almost impossible. Lenders have sometimes lost the benefits of their liens because of this mingling.

BILLS RECEIVABLE AND ACCOUNTS RECEIVABLE.—The selling of a company's open-book accounts is a common practice but one generally **frowned upon by banks** as an indication of the seller's financial weakness. Accounts may be **assigned** or **hypothecated** to commercial banks in some cases, but loans will seldom be granted for more than 80% of the face value of the accounts. Usually accounts are sold to **discount companies** which make a business of such transactions, rather than to commercial banks. Federal Reserve banks will not rediscount assigned open accounts, holding that they are not negotiable.

Accounts receivable are, therefore, not considered a high type of security. Only the smaller and weaker concerns make a practice of securing their current working funds in this way. The hypothecation of accounts receivable involves a great deal of work in the way of investigations and collections.

REAL AND PERSONAL PROPERTY MORTGAGES.—These are generally not considered the most desirable form of collateral for a commercial bank loan. Real estate mortgages can seldom be quickly liquidated, and national banks, before the passage of the Federal Reserve Law, could not lend on such security. The Federal Reserve Act, however, provides that banks in reserve cities and country banks can lend:

1. On first mortgages only.
2. Up to 50% of the actual value of the land.
3. Up to one-half of the time deposits and one-third of the capital and surplus of the bank.

LOANS AND DISCOUNTS OF NATIONAL BANKS.—A classification of the loans and discounts in the three fiscal years indicated and reported by banks in reserve cities and states is shown on the following page.

DEMAND AND TIME LOANS.—Loans may be classified according to their duration. **Demand loans,** known also as **call loans,** may be terminated at any time by the action of either party. The borrower may pay at any time before payment is demanded, and the lender may likewise demand immediate payment. There is usually an understanding between the bank and the borrower that payment will not be demanded until some time which is convenient to the borrower. The only call loans which are so in fact as well as in name are confined to New York Stock Exchange transactions. Rates of interest for them fluctuate from day to day. The ordinary merchant or manufacturer sometimes finds it convenient to borrow money on so-called demand loans, but a loan of this kind may run for 6 months, a year or even longer.

Time loans are loans which **have a definite maturity date.** The majority of loans made by commercial banks are time loans. There are **two main classes** of time loans:

1. Loans on promissory notes
2. Loans on discounted paper

The 90-day loan is the most common. A Federal Reserve bank may discount for any of its member banks, notes, drafts or bills of exchange that have a maturity date not more than 90 days from the date of discount.

The **rate of interest** on time loans is slightly higher than that on demand or

Classification of Loans and Discounts for the Three Fiscal Years Indicated

(In thousands of dollars)

Class	June 30, 1922		June 30, 1923		June 30, 1924	
	Amount	Per cent	Amount	Per cent	Amount	Per cent
On demand, paper with one or more individual or firm names (not secured by collateral)	$ 657,298	5.84	$ 733,536	6.21	$ 737,559	6.16
On demand, secured by stocks and bonds	1,408,369	12.52	1,463,203	12.38	1,545,625	12.90
On demand, secured by other personal securities, including merchandise, warehouse receipts, etc	270,583	2.41	276,090	2.34	263,618	2.20
On time, paper with one or more individual or firm names (not secured by collateral)	5,818,207	51.73	6,176,743	52.27	6,123,604	51.12
On time, secured by stocks and bonds	1,499,092	13.33	1,519,317	12.86	1,559,698	13.02
On time, secured by other personal securities, including merchandise, warehouse receipts, etc	1,112,434	9.89	1,111,273	9.40	1,087,096	9.08
Secured by improved real estate under authority of Section 24, Federal Reserve Act, as amended:						
1. On farm land	101,795	.90	108,892	.92	116,009	.97
2. On other real estate	87,035	.77	125,070	1.06	188,897	1.58
Secured by real-estate mortgages or other liens on realty not in accordance with Section 24, Federal Reserve Act, as amended:						
1. For debts previously contracted (Section 5137, R. S. U. S.)—						
(a) Farm lands	100,784	.90	127,339	1.08	120,122	1.00
(b) Other real estate	60,351	.54	67,942	.57	74,535	.62
2. All other real-estate loans—						
(a) Farm lands	6,522	.06	10,393	.09	9,031	.08
(b) Other real estate	14,804	.13	23,101	.19	26,543	.22
Acceptances of other banks discounted	75,906	.67	60,874	.51	91,026	.76
Acceptances of reporting banks purchased or discounted	31,911	.28	11,392	.10	33,998	.28
Customers' liability on account of drafts paid under letters of credit	3,123	.03	2,506	.02	1,367	.01
Total	$11,248,214	100.00	$11,817,671	100.00	$11,978,728	100.00

call loans. This is due to the greater risk that banks run in tying up their funds for a definite length of time. Their assets are not as liquid as when their loans must be repaid on demand. The later the maturity date of a loan, the more difficult it becomes for banks to forecast what the condition of the money market will be when the loan is repaid. Banks will, therefore, normally charge a higher rate for a 4 or a 6 months' loan than for one of 30 or 60 days.

CLASSIFICATION OF LOANS ACCORDING TO OBLIGATION OF PARTIES.—

Single-Name Paper.—Single-name paper means those promissory notes, which bear the **name of the maker only,** whether it be an individual, a firm or a corporation. A large majority of the loans made by banks in the United States to business borrowers are those secured only by single-name paper.

Two-Name Paper.—There are three kinds of two-name paper:

1. Accommodation paper
2. Discounted notes receivable
3. Acceptances

Accommodation paper is paper which has been endorsed by one or more parties, without consideration, merely to enable the maker to obtain credit. The accommodating party is generally not identified with the business of the borrower, and his name adds an element of security to the note for the benefit of the holder. If the maker of the note is unable to meet his obligations at maturity, the accommodating endorser becomes liable to the holder.

When the holder of a note **discounts** it with his bank, it becomes two-name paper because he must endorse the note or acceptance to have it discounted. If the maker of a note or acceptance defaults, the bank looks to the endorser for payment.

An **acceptance** is two-name paper because it bears the name of the maker and the acceptor; the latter primarily responsible for its payment.

Obtaining Loans

INFORMATION REQUIRED BY BANKS.—When loans are desired from banks financial managers should be prepared to furnish them with the following information:

1. **Type of business**—whether a sole proprietorship, a partnership, or a corporation.
2. The **names of the owners or officers** and their relation to the business.
3. **Kind of business**—whether trading, manufacturing, mining or professional, and the kind of products in which it deals.
4. The **latest available balance sheet** and balance sheets for the preceding 2 or 3 years in the form desired by the bank.
5. **Income statements** for the past 2 or 3 years.
6. The **average inventories** carried, valued at cost or market, whichever is lower. The condition of the inventories and the manner of valuation are considered.
7. The **amounts of notes and accounts receivable,** classified as overdue, due and not due.
8. A **complete schedule of investments,** showing last dividends or interest payments with dates thereof, present market value of securities and reasons for holding same.
9. A full statement of the amount of **notes receivable, accounts receivable and merchandise pledged** to secure indebtedness.

10. **Unusual balance sheet items**—a full explanation of any unusual items on the balance sheet.
11. A statement showing when the liabilities of the borrower are greatest, that is, when the firm is likely to reach the **peak of its borrowing operations.**
12. The customers' **methods of borrowing**—whether or not they sell their paper in the open market, and if so, the frequency and amount of such borrowing. The line of credit they have at other banks and whether or not it is kept open.
13. A statement of the **insurance** carried on the assets and on the lives of important officials or executives of the company.
14. Whether the borrower has made **adequate provisions for depreciation** of assets, the method of handling it, the rates and the manner of computing it.
15. The policy of the borrower in **disposing of the earnings of the business,** whether or not such earnings are all paid out as dividends or whether a certain proportion is reinvested in the business.
16. An **analysis of surplus** indicating the profits for the current year and the proportion of the profits used for dividends, reserves of various kinds and what disposition is made of the surplus.
17. Whether the business **owns or rents its premises** and whether the earnings of the company have been affected by favorable leases which are about to expire. For instance, low costs of production might be accounted for by a favorable long time lease of the factory.
18. A statement of any **important construction or capital expenditures** planned by the company and the means by which they will be financed.
19. **Other business interests** of the owners or officers of the borrowing company.
20. **Loans of officers**—if **loans** are made to the company by its officers and directors or by the company to them.
21. The amounts **due to or from subsidiary companies** and for what purpose such subsidiaries are financed and whether or not they are self-supporting.
22. **Unfilled orders** on the books of the company and whether they are bona fide, doubtful, or likely to be cancelled.
23. The **nature of the borrower's trade;** whether they are selling largely to one customer, or small group of customers, or to a large trade group; also, the present financial condition of those customers.
24. Whether the **products** are **diversified,** or whether the company is dependent on marketing only one type of goods, and the **geographic distribution of the borrowers' trade.**
25. The **relation of labor to the management** and the attitude of the company and its officers toward labor.
26. The periods of the year during which **peak production** will occur, or large inventories be carried, and the periods when largest sales and collections may reasonably be expected.

Financial managers, in order to supply the information required by banks as indicated in the foregoing paragraphs, must know the real condition of their business. To have always before them means of knowing whether the business is improving or getting worse, they should devise simple methods of testing the conditions from time to time. This can be done by having a balance sheet drawn up on the basis of what may be considered an ideal condition of the business. A number of columns should be left open for insertion of figures

showing the actual condition of the business at the time the **ideal balance sheet** is drawn up and at the end of each period, either weekly, monthly, quarterly or yearly. The differences will indicate whether the conditions are improving or getting worse, as the figures approach or recede from the ideal figures.

FACTORS CONSIDERED BY BANKS.—In granting loans banks usually consider the information required from the borrower, set forth in the previous section, as well as the following factors:

1. **Financial condition of the borrower.** The financial condition of the business must indicate that the borrower will be able to repay the loan at maturity. To do this the loan should be invested in some self-liquidating operation.

2. **Type of security.** If the loan is secured, the collateral pledged should be of a type which can be sold readily in case of default by the borrower. If the loan is unsecured, the bank must be certain that the borrower's assets are sufficient to cover the amount of the loan in the event of a forced liquidation.

3. **Form of security.** The security or paper to be acceptable for loans should be in such form that it can be readily sold or rediscounted.

4. **Character, capacity and capital.** The general credit standing of the business, the moral calibre of its managers and their managerial ability, are all considered in granting credit. These factors have often been summed up in the well known **three "C's" of credit,** namely, character, capacity and capital.

5. **Type of business.** In making loans the banks also consider the kind of business, products dealt in and the terms of purchase and sale prevailing in that business.

6. **Geographical location of business.** Bankers generally consider the geographical location of the borrower's business as the economic, financial, political, climatic and business conditions of various sections of the country have an important bearing on the factors determining bank loans.

Analysis of Borrowers' Statements

Statements presented to bankers for borrowing purposes are subjected to a close and exacting analysis. This analysis is both qualitative and quantitative. **Qualitative analysis** consists of an examination of the character and inherent soundness of each item appearing on borrower's statements. **Quantitative analysis** consists of an examination of the amount of assets and liabilities as well as the ratio they bear to one another.

A system of analyzing financial statement of borrowers is set forth in a pamphlet issued by The Robert Morris Associates (the national organization of bank credit men) under the title "Financial Statements," which is reproduced here:

FINANCIAL STATEMENTS

1. Financial statements are called for by banks in order to get a survey of the financial condition of the risk. Under even the closest and most careful analysis the study of any statement cannot cover the whole risk because there are other elements quite as important as the financial element which in many instances would entirely offset a poor or good financial showing. The **elements in analysing a risk** can be generally divided into three types.

2. One element in a risk is the **financial strength** displayed. This is reflected by the amount of assets and liabilities, their various proportions and qualities. It seems fair to assume that this element directly **affects about 40% of the credit decision.**

3. A second element is the so-called **moral risk.** This has to do not alone

with the ethical side of the risk but with the effectiveness as well as the honesty of the management. It covers both **integrity and all phases of ability.** This element is probably at least equal in importance to the financial risk and probably affects about **40% of the credit decision.**

4. The final element is the **economic risk.** This element has to do with the effect upon any business of **general economic conditions.** The up and down of general or sectional prosperity affects all industries favorably or adversely. Basic discoveries in the raw material field, excess or sudden increase in such raw material or sudden contraction directly affects industries using it. The law of supply and demand is an immutable force that can be stemmed for a while by law or regulation but which in the end will produce its effect. The actions of this element in the risk are only minutely affected by the individual operations of a single name because of its small percentage relation to the whole condition. It is rather an outside force that is cumulative and in many instances all controlling. Normally, however, it is secondary to the financial and moral risk elements and has perhaps about a **20% effect upon the credit decision.**

5. These three elements with relative values of 40%, 40% and 20% cover the whole analysis of the risk making up in their total the 100% of credit decision. It is the principal object of this brochure to discuss the first mentioned element, or the financial risk, as disclosed by the property statement. To make a statement analysis yield the maximum concerning this element, advancing perhaps over the border a little to the point where close statement analysis will throw some light upon the other two elements, is to make one part of our total analysis as complete as possible.

6. Statement analysis as generally carried on today made its first appearance some twenty odd years ago. At that time it was first recognized that statements could be compared more easily over a period of years and changes noted if they were set side by side so that volume fluctuations of individual items would be more readily apparent. This was a decided and much needed betterment in analytical technique.

7. When credit men began to make such actual direct comparisons it was but a short step to **segregate and group certain classes of items.** There are assets which liquidate quickly under pressure and at a fairly high percentage of book listing. There are other items that have a feature of permanency which compels them to liquidate only slowly and often with a marked degree of contraction in value, as compared to book value listing. From this condition it became customary to speak of **quick and slow or fixed assets,** the terms being indicative of the speed and character of liquidation.

8. In a like manner the presence of items, demanding early settlement, became equally noticeable among the liabilities. There were other items the final or actual payment of which had been deferred by agreement. So in a similar manner the phrases **quick or current liabilities and funded or deferred liabilities** began to assume a value and to get a differentiated consideration that was not present before comparative analysis was practiced.

9. Current liabilities demand payment in a fairly immediate future and so it was a perfectly logical step to establish a direct **comparison of the total of the current liabilities with the total of the current assets** from the liquidation of which funds should accrue with which to pay this class of liability. The common factor of supposed ready liquidity quite naturally made their direct comparison desirable. At the same time the desirability of having a factor of safety was recognized. In liquidation there is an ever present shrinkage from the book listed value of the current assets and often an increase in the book figures

of the current liabilities. This safety factor is what has led to the phrase **"two for one"** and is also what has established the desire to have this proportional listed value as between current assets and current liabilities. The margin that has so generally become almost a standard provides for a contingency in which the current assets can depreciate 50% over their listed book value and still be sufficient to equal the presently maturing debts.

10. The tacit acceptance of "two for one" or any other **current ratio,** however, has several serious errors. First of all it does not take into consideration the varying degrees of liquidity of the separate items that go to make up the total of the current assets. If the total of the current assets, to use an extreme case, be made up entirely of cash the actual liquidity is hardly open to question, and a very small factor of safety would suffice. But if primarily made up of merchandise, the salability of that merchandise would be a highly important element in determining the true amount of the liquid current assets. The same thing applies when considering the receivables only that it is their true collectivity that affects the quality of the real current assets and their currency. Secondarily the acceptance of any set current ratio, as a universal measure, overlooks entirely the decided differences in current asset values in different lines of industry. To understand this clearly, only one example need be given. By taking two widely different types of business, such as wholesale millinery and wholesale hardware, we can see at a glance the inequalities that might arise. The hardware business is stable, the millinery business is temperamental. Ladies change their ideas of the proper color of hats almost overnight. A monkey-wrench, however, is pretty nearly always a monkey-wrench and is not as volatile in its value fluctuations. If a two for one current ratio is correct for either, it is not correct or fair at the same time for the other.

11. The value in statement analysis of expressing the relation of one set of items to another has been accepted generally by the adoption of the current ratio, or proportion between current assets and current liabilities. The first reaction from this thought is that, if a study of the ratio of the relative proportions of current assets and liabilities has proven so valuable, there are, in all probability, other ratios or proportions between the other salient factors of the statement that would reflect interesting conditions showing progress or retrogression in a way to amplify the current ratio studies so generally used.

12. This thought led to the examination of many statements to determine at least some of these possibly helpful studies of collateral ratios. So far the ratios under trial have been confined to those that could be developed from the balance sheet itself supplemented by the item of sales alone. There has been some suggestion that certain ratio studies should be made which involved the relation of profits to sales, net worth, etc. So far this has not been experimented with because of a lack of well co-ordinated and exact detailed information covering earnings and net profits. Accounting methods on available statements and possible variation because of profits disbursed through salaries, partnership accounts, etc., have suggested the wisdom of withholding from this further study for the present. At a later date it may be advisable to make experiments in this field and where the information now available is accurate and uniform in method of issue over a period, its use in various relative comparisons would undoubtedly be of great advantage.

13. The **actual ratios** which have so far been under examination and test, as supplementing the well known current ratio, are herewith briefly presented. The method of derivation is explained, the results obtained noted and the general principle involved commented on.

A—MERCHANDISE TO RECEIVABLES

Method of Derivation: To secure this ratio, in the manner used in this system of analysis, divide the total of the merchandise inventory by the total of the accounts and bills receivable, resulting from merchandise sale.

Result: The resulting ratio will indicate the dollars of merchandise there are for every dollar of merchandise sale receivables.

Principle Involved: Merchandise is now generally carried **at cost or market, whichever is lower.** Accounts and bills receivable, however, represent selling price, which is **cost plus gross profit.** The addition to the assets of a profit item not offset by any operating cost or borrowing necessity, tends to raise the proportion as between current assets and liabilities. A comparison of this ratio from year to year will disclose whether there is a greater or less amount, in proportion, of profits figured as part of the current assets. If this be greater, technically we should have a rising current ratio. As the percentage relationship of merchandise to receivables falls, there is a greater cost plus condition and there should be a higher current ratio.

Example: The following two statements are identical, except that $100,000 has been switched from merchandise to accounts receivable, with 40% added to the amount to raise cost of merchandise to selling price with profit. While this percentage varies, the principle is the same, in greater or less degree, as the percentage relation is up or down.

Example of Merchandise-Receivable Ratio Theory

ASSETS	As Mdse.	After Conversion
Cash	$ 60,000	$ 60,000
Receivables	50,000	190,000
Merchandise	200,000	100,000
Current Assets	310,000	350,000
Plant	500,000	500,000
Prepaid Expenses, etc.	20,000	20,000
Total	$830,000	$870,000
LIABILITIES		
Notes Payable	$125,000	$125,000
Accounts Payable	45,000	45,000
Tax Reserve	15,000	15,000
Current Liabilities	185,000	185,000
Mortgages	100,000	100,000
Total Debt	285,000	285,000
Capital	300,000	300,000
Surplus	245,000	285,000
Total	$830,000	$870,000

In the first instance the current ratio is expressed by the following fraction and its equivalent percentage:

$$\frac{310{,}000}{185{,}000} = 167.56\%$$ with the Merchandise to Receivables ratio at 400%.

In the second instance, after the transfer of merchandise to accounts, it is

$$\frac{350{,}000}{185{,}000} = 189.18\%$$ with the Merchandise to Receivables ratio at 52%.

B—WORTH TO FIXED OR NON-CURRENT ASSETS

Method of Derivation: To secure this ratio, divide the net worth by the net non-current assets.

Result: The resulting ratio will indicate the dollars of net worth, or stockholders' investment, for every dollar not currently invested. The margin above 100% indicates the proportion over and above fixed capital investment that the stockholders have provided as active working capital possible of investment in liquid assets.

Principle Involved: Plant and other non-current assets are a capital investment. The stockholders should in general, by their capital contributions, provide for the plant equity and the cost of all other non-current assets. There should be a **substantial stockholders' investment** over and above this amount, to provide working capital, as the phrase goes, for the "going part" of the business.

This ratio is also a means of **measuring plant expansion.** Between two periods a company may show a considerable increase in worth, indicating profitable operations. The disposition of these profits is, however, of considerable importance to the creditor. If all the increase is put in non-current assets, we have the condition of conversion of liquid into fixed capital which may extend to such a point as to indicate that the results of current borrowings have been invested in fixed assets. In our ratio study this would make itself evident by the falling of the ratio of worth to fixed assets.

This development is to be expected more in times of rising prices and stimulation of the hope of future large profits. A comparison of this ratio year by year may help to **check undue plant expansion** that leads later to unproductive capital and increased overhead.

This condition may also become noticeable when much remodelling of old plant becomes necessary through obsolescence. In such a case there may be a temporary extraordinary plant item being the old plant plus the new. If, however, the remodelling has been properly thought out this condition should correct itself with reasonable promptness. This condition should be investigated and allowed for because if it will actually increase efficiency it may be justifiable.

C—SALES TO RECEIVABLES

Method of Derivation: To secure this ratio, divide the net sales for the year by the total of the accounts and bills receivable.

Result: The resulting ratio will indicate the dollars of sales per year for every dollar carried on the books as receivables.

Principle Involved: The higher the amount of sales for every dollar still uncollected, the greater will be the liquidity of the receivables. As this ratio rises, the length of the collection period decreases. As this period decreases, we **shorten the period of risk through bad debts,** possible crisis and panic troubles, and **lessen the expense of carrying accounts.** The higher this ratio, within reasonable bounds, the fresher and more desirable as an asset are the receivables.

A condition of high collectivity and freshness of receivables may in a large measure offset a low current ratio. A low collectivity or stale receivables, as expressed by this ratio, may prompt a demand for a higher current ratio so as to secure a wider margin against possible shrinkage in liquidation.

D—SALES TO MERCHANDISE

Method of Derivation: To secure this ratio, divide the net sales by the total merchandise inventory.

Result: The resulting ratio gives the dollars of sales for every dollar reported as inventory.

Principle Involved: The principle here involved is similar to that involved in the previous section (C). It is a test of the **freshness and salability of the merchandise,** and is particularly important as a means of recognizing an over-inventoried condition or accumulation of stale merchandise and possible danger in a period of probable price recessions.

Both this and the previous ratio (C), when set into comparison year by year, indicate increasing or decreasing liquidity of their respective assets, and support a possible weakening current ratio, or negative an apparently increasing current ratio.

E—SALES TO WORTH

Method of Derivation: To secure this ratio, divide the net sales by the net worth.

Result: The resulting ratio will record the dollars of sales for every dollar of stockholders' invested capital.

Principle Involved: To be productively and sanely employed business principles demand a certain normal activity of invested funds. If the money invested, and left in the business by the stockholders is turned over too slowly, it is less productive. If it be too sluggish in its movement, it may indicate what is commonly called **"dry rot."** On the other hand, if this ratio is too high, it may indicate that the company is over-extending its operations and getting into a position of doing too much business for its capital investment. Either of these conditions approaches the danger point of credit when approaching an extreme.

F—WORTH TO DEBT

Method of Derivation: To secure this ratio, divide the net worth by the total debt, both current and funded.

Result: This ratio gives as a result the proportion that exists between the investment by the stockholders and the capital loaned to the company.

Principle Involved: In the productive activity of any business, there are **two kinds of capital funds** used, under two controls. The first is the capital, surplus and undivided profits or **net worth of the business.** The second is the **debt of the concern,** which is measured and controlled by its credit standing, and by the will of its creditors.

The proportion that exists between the worth and the debts shows quite clearly the balance between the source and the ownership of the funds being used in the affairs of the business. As the proportions of debt increase over the funds invested by the stockholders, the company becomes more dependent for working capital upon the decisions of its creditors, and the more susceptible to the strains and pressure of crisis.

The lower the worth to debt ratio, the more extended becomes the reliance of the owners upon their moral risk strength. Therefore, any event that will shake the belief in the moral risk, the greater will be the jeopardy of such a company. Too great reliance upon the good will of creditors will be shown by too low a worth to debt ratio. An abnormally low ratio should prompt the conservative credit grantor to investigate his risk more closely, and should influence the business executive to consider the advisability of revamping his affairs so as to establish a better balance between the capital invested and capital secured through loans. The having of too heavy a debt, especially if current in its

Company A

Date, December 31st	1918	1919	1920	1921	1922
Cash	$ 3,132.30	$ 3,915.27	$ 4,306.50	$ 4,785.70	$ 4,470.93
Receivables	27,234.27	32,103.50	32,956.47	39,167.23	32,658.93
Merchandise	31,184.54	39,306.60	36,793.17	36,017.22	30,466.53
Current Assets	61,551.11	75,325.37	74,056.14	79,970.15	67,596.39
Fixed Assets	51,542.54	50,887.00	59,500.19	61,073.22	61,000.00
Total	$113,093.65	$126,212.37	$133,556.33	$141,043.37	$128,596.39
Notes and Accounts Payable	30,168.21	35,610.84	32,878.17	34,764.42	31,319.22
Tax Reserve		1,566.00	3,124.00	4,000.00	1,570.00
Current Debt	30,168.21	37,176.84	36,002.17	38,764.42	32,889.22
Funded Debts	19,575.00	15,268.00	12,520.00	7,916.00	3,900.00
Total Debt	49,743.21	52,444.84	48,522.17	46,680.42	36,789.22
Capital	40,000.00	40,000.00	48,000.00	56,000.00	56,000.00
Surplus	23,350.44	33,767.53	37,034.16	38,362.95	35,807.17
Net Worth	63,350.44	73,767.53	85,034.16	94,362.95	91,807.17
Total	$113,093.65	$126,212.37	$133,556.33	$141,043.37	$128,596.39
Sales	144,855.00	180,090.00	199,665.00	203,580.00	187,920.00

Company B

Date, December 31st	1918	1919	1920	1921	1922
Cash	$ 1,566.00	$ 2,192.40	$ 2,505.60	$ 2,818.02	$ 3,052.92
Receivables	19,938.31	25,419.31	24,636.31	26,202.31	25,575.91
Merchandise	10,698.91	18,137.41	24,088.22	28,786.21	31,237.17
Current Assets	32,203.22	45,749.12	51,230.13	57,806.54	59,866.00
Fixed Assets	19,575.00	19,575.00	23,490.00	35,040.50	47,375.00
Total	$51,778.22	$ 65,324.12	$ 74,720.13	$ 92,847.04	$107,241.00
Notes and Accounts Payable	15,558.21	21,822.21	24,954.21	27,538.11	29,104.11
Tax Reserve		780.00	780.00	1,400.00	1,575.00
Current Debt	15,558.21	22,602.21	25,734.21	28,938.11	30,679.11
Funded Debts	9,670.00	12,000.00	15,660.00	23,500.00	27,400.00
Total Debt	25,228.21	34,602.21	41,394.21	52,438.11	58,079.11
Capital	23,500.00	23,500.00	23,500.00	27,500.00	35,000.00
Surplus	3,050.01	7,221.91	9,825.92	12,908.93	14,161.89
Net Worth	26,550.01	30,721.91	33,325.92	40,408.93	49,161.89
Total	$51,778.22	$ 65,324.12	$ 74,720.13	$ 92,847.04	$107,241.00
Sales	86,130.00	105,705.00	125,280.00	140,940.00	122,931.00

nature, is like having a temperamental partner who may at any time wish to be paid out.

G—SALES TO FIXED OR NON-CURRENT ASSETS

Method of Derivation: To produce this ratio, divide the net sales by the net total non-current assets.

Result: The resulting ratio will indicate the dollars of net sales for every dollar invested in plant or other non-liquid assets.

Principle Involved: The comparative earning capacity of plant investment depends, in a large measure, on the volume of goods it can produce and sell. This ratio can be used to good advantage in connection with the ratio of worth to non-current assets (B). If the worth to non-current assets be a falling ratio, or below normal, and the sales to fixed assets be also a falling ratio, or below normal, then we are faced with a condition in which plant is enlarging more rapidly than worth, in proportion, and its sales productivity is not keeping pace with its increase in size. It then becomes the duty of the credit grantor and the executive to urge increased production efficiency, and not expansion of plant. As stated in section B, this ratio can be used to check up on the conversion of liquid capital into fixed capital, because plant extension is vindicated economically only if efficiency and resulting productivity demand it. This falling ratio may appear for a time where a new management takes over an old plant that needs revamping. If the investigation because of such a fall in this ratio discloses this fact and if policy is sound no alarm need necessarily be felt.

It is, of course, understood in sales ratios that allowance must be made to correct for price level changes if they are present in marked degree or variation.

AN EXAMPLE OF ANALYSIS

While the preceding pages outline in theory the principles of ratio or relationship analysis, it is more likely that a clearer understanding of the method can be gained from an example in figures and an analysis of them. For this purpose the figures of Company A and Company B are presented so that their analysis may be followed. (See pages 1206 and 1207.)

After spreading a statement on the comparison sheet, present generally accepted practice proceeds to the development of the **Current Ratio** so that by a comparison of it, progress by this test may be observed. The following table records the current ratios for each of the companies set into direct comparison. There is a slight variation from common practice in the method of recording in that the relation is expressed in percentages rather than in the fraction form more commonly used. For example, the current ratio for Company A is expressed as 204 instead of 2.04 to 1. It means that there are $204 of current assets on the statement for each $100 of current liabilities. At times this has been somewhat confusing to the person using this method for the first time. The method has been used, in this sort of analysis, because it is much easier to effect further use of the proportion than would have been possible by the adherence to the fraction form. Any one preferring to follow the older method of expression can do so by pointing off two decimal places and adding the phrase "to 1" in any of the ratios. A "2 to 1" current ratio by the percentage expressions becomes a current ratio of 200%.

It will be noted at once that all ten of these ratios, five for each company, when expressed in the fraction form would be "2 to 1" statements. As far as their current ratios are concerned these statements are nearly equal in strength.

To some a graphic display indicates trends more clearly than figures and for

A and B Companies' Current Ratio Record

	Company A	Company B
1918	204	206
1919	202	202
1920	205	199
1921	206	199
1922	205	195
Average	204	199
Combined Average	202	202

those the current ratios have been reduced to chart form by using their common average as a base line of 100% or par and then establishing the relation of the separate yearly ratios to this base (Fig. I).

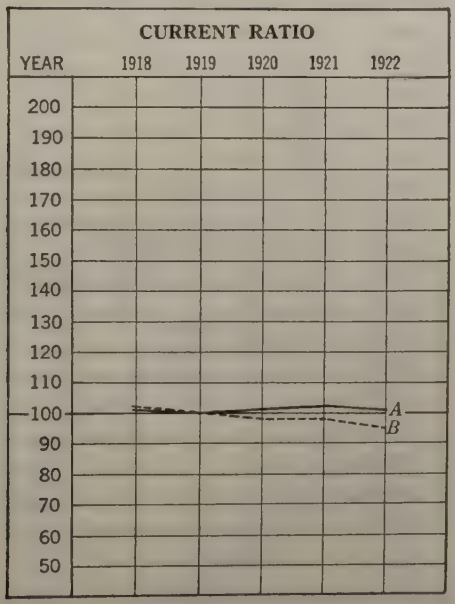

FIG. I

Graphic Display—A and B Companies

As was explained in the theoretical statement on ratio or relationship analysis, it is important to check the relationship of **net worth,** or owner's capital, to **the investment in non-current assets.** This has been done for the two companies under analysis and the resulting comparative table indicates the movement of this proportion for each company.

This shows a steady improvement to 1921 for the A Company with a slight drop-off in 1922, but still above the average for the period. Contrasted to this

Worth to Fixed Assets Ratio

	Company A	Company B
1918	122	135
1919	144	156
1920	142	141
1921	154	115
1922	150	104
Average	143	124
Combined Average	137	137

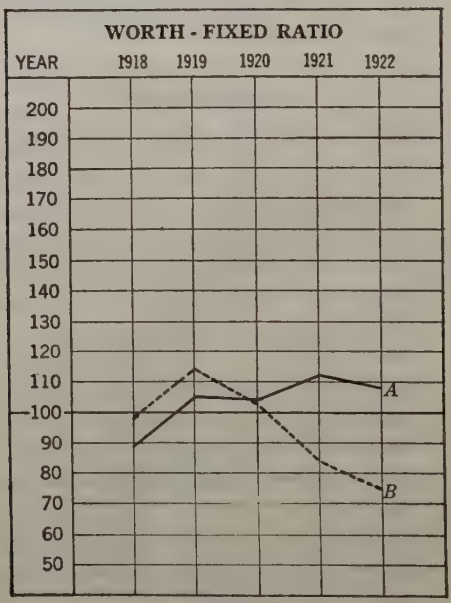

FIG. II

notice the drop in the relationship of the figures of Company B from 135 to 104 in 1922 and 20 points below the average position for that company during the five years. This shows clearly a falling proportion between the net worth and the fixed assets for the B Company. It now has only $104 of net worth for every $100 of fixed assets or $4 margin of its own money to be used in the current operation of the business for every $100 of fixed assets. Company A in the meantime has increased its proportion of net worth over fixed assets so it is now using 50% of its own capital in the current operations of the business.

The net worth of a concern is the cushion on which the creditor sits. It is the amount by which the assets can shrink before the creditors lose anything. We all know that the softer the cushion the more comfortable it is and the longer will

one be inclined to sit. However, when the cushion is stuffed with bricks and mortar we become dissatisfied with our seat. This is the case of the B Company. It is becoming a harder cushion all the time. Company A, on the contrary, has made its cushion softer. The tying up of worth in fixed assets must be carefully watched. The graph in Fig. II will show what happened to the worth-fixed ratios of these two companies—the more or less steady climb of A Company and the decline from 1919 of B Company.

The relation borne by the owned capital to the borrowed capital is a very important proportion on any property statement. This proportion, as expressed by the relation of **Net Worth to Total Debt**, has been developed for the two companies being analyzed, and is as follows:

Worth to Debt Ratio

	Company A	Company B
1918	127	105
1919	140	88
1920	175	80
1921	202	77
1922	249	84
Average	174	85
Combined Average	132	132

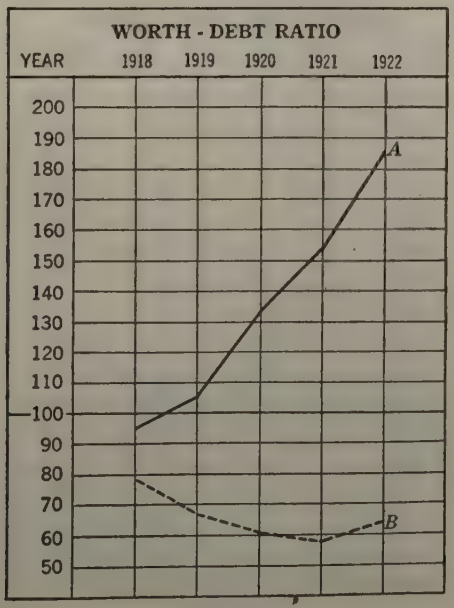

Fig. III

From this table it can be noted quite readily that Company A has very materially improved its control over the capital at use. In 1918 the worth of this company was 127% of its debts and by 1922 this has risen to 249%. At the start the net worth exceeded the debts by a trifle over one-quarter, while at the end of the period it was nearly two and one-half times as great. This change very clearly shows the increasing reliance on owned capital.

Company B has, however, shown a tendency to rely in a steadily increasing proportion on borrowed money to secure funds for financing its activities. This is an unhealthy sign in a marked degree when compared to the performance of Company A. The real condition has been obscured from being reflected in the current ratio because of the increased funded debts. The use of this ratio throws into sharp relief this tendency to borrow quite irrespective of the borrowing method, however.

The sharpness of the contrast in method is very clearly shown by the graph in Fig. III that has been prepared from the Worth to Debt Ratios of the two companies.

The merchandising ability and record of the two companies can be studied by the **Sales to Merchandise Ratio** record. The chart of this ratio is offered herewith together with its graph (Fig. IV) without further explanatory comment, because the trends seem so apparent as not to need explanation.

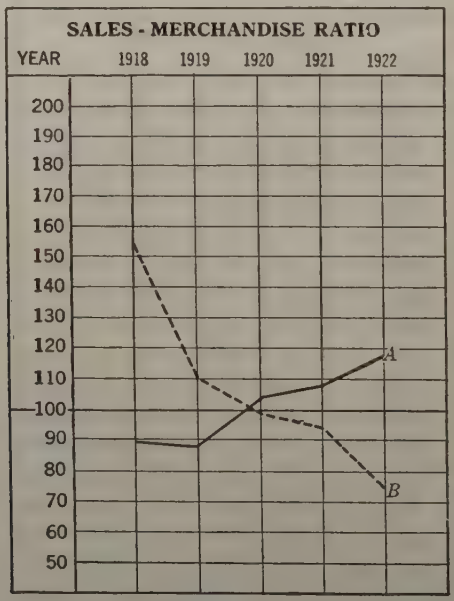

Fig. IV

Sales to Merchandise Ratio

	Company A	Company B
1918	464	805
1919	458	582
1920	542	520
1921	565	489
1922	616	393
Average	527	514
Combined Average	522	522

The collection methods and record are shown by the movements of the **Sales to Receivables Ratio** which are shown here in chart and graph form. (Fig. V.)

Sales to Receivables Ratio

	Company A	Company B
1918	531	432
1919	561	415
1920	605	508
1921	519	537
1922	575	480
Average	558	477
Combined Average	523	523

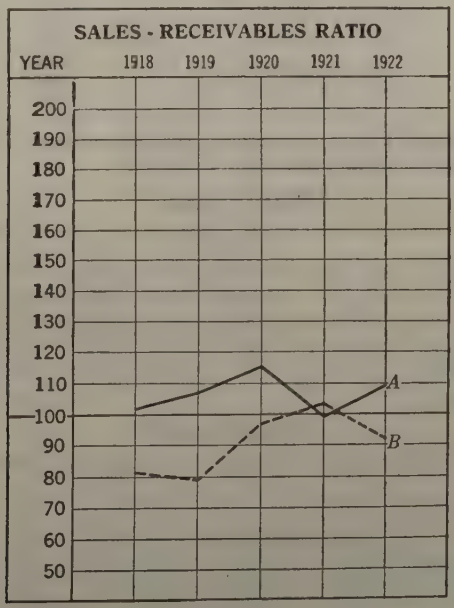

FIG. V

One objection to the ratio or relationship method of analysis is that there are eight sets of proportions to be read instead of the more generally used single proportion of the current ratio.

The Robert Morris Associates are investigating a method of combining such ratios as seem of importance in analyzing any name over a period of years into one index figure. As yet this is frankly in the experimental stage and while the tests so far seem to indicate the feasibility of accomplishing this end, there are details that will undoubtedly need adjustment and which will be subject to change as the experiment is carried further along. The method as so far developed has been applied to these two companies and is here presented, not as a completed principle, but as an experiment, in order to stimulate interest and arouse comment from which valuable opinion may be gained.

An Index for Companies A and B

As a first step five ratios have been selected as important in analyzing the relative position and strength of these companies. These are **not of equal value** and in order to establish a scale of relative values an arbitrary weighting has been chosen. The relation of the weights to each other will indicate the relative importance attached to the several ratios and have been so selected as to total one hundred. The ratios used and their relative importance is shown in the following table:

Weight Table

Current Ratio	25
Worth to Fixed	10
Worth to Debt	25
Sales to Receivables	20
Sales to Merchandise	20
Total	100

The actual ratios of the two companies used in this analysis are as listed below, those not being used in the index being eliminated.

Ratios Company A

	1918	1919	1920	1921	1922	Av.
Current Ratio	204	202	205	206	205	202
Worth-Fixed	122	144	142	154	150	137
Worth-Debt	127	140	175	202	249	132
Sales-Receivables	531	561	605	519	575	523
Sales-Merchandise	464	458	542	565	616	522

Ratios Company B

	1918	1919	1920	1921	1922	Av.
Current Ratio	206	202	199	199	195	202
Worth-Fixed	135	156	141	115	104	137
Worth-Debt	105	88	80	77	84	132
Sales-Receivables	432	415	508	537	480	523
Sales-Merchandise	805	582	520	489	393	522

The next step in the index development is to **compute the relation of every ratio each year to a base ratio** which in this study is the common average of the ratio for both companies. For example, the current ratio of 204 in 1918 for Company A is 101% of the average current ratio of 202%. That is to say, the

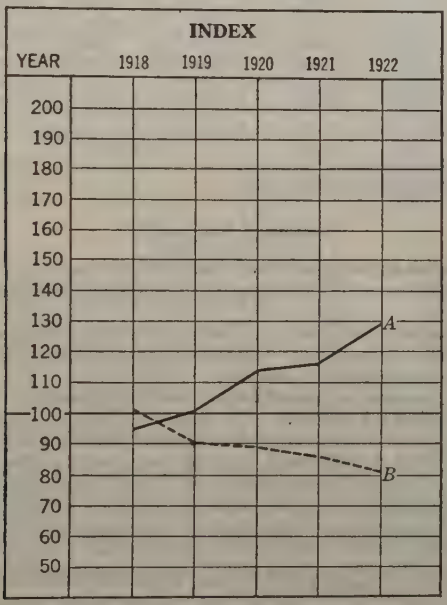

FIG. VI

current ratio of Company A is 1% stronger than the common average. In the preparation of the index this relative position of a ratio is multiplied by the weight assigned to that ratio. In the instance of the current ratio for Company A in 1918 this means taking 101% of 25, or establishing a value for the current ratio that year of 25.25 when measured against the common base.

This same method applied to the five ratios used to make this particular index results in the following table:

Index Company A

	Wt.	Rel.	Value	Rel.	Value	Rel.	Value	Rel.	Value	Rel.	Value
Current Ratio.....	25	101	25.25	100	25.00	101	25.25	102	25.50	101	25.25
Worth-Fixed.....	10	89	8.90	105	10.50	104	10.40	112	11.20	109	10.90
Worth-Debt.....	25	96	24.00	106	26.50	133	33.25	153	38.25	188	47.00
Sales-Receivables..	20	101	20.20	107	21.40	115	23.00	99	19.80	110	22.00
Sales-Merchandise.	20	89	17.80	88	17.60	104	20.80	108	21.60	118	23.60
Total.....	100		96.15		101.00		112.70		116.35		128.75

Index Company B

	Wt.	Rel.	Value	Rel.	Value	Rel.	Value	Rel.	Value	Rel.	Value
Current Ratio.....	25	102	25.50	100	25.00	98	24.50	98	24.50	96	24.00
Worth-Fixed.....	10	98	9.80	114	11.40	103	10.30	84	8.40	76	7.60
Worth-Debt.....	25	79	19.75	67	16.75	61	15.25	58	14.50	64	16.00
Sales-Receivables..	20	82	16.40	79	15.80	97	19.40	103	20.60	92	18.40
Sales-Merchandise.	20	154	30.80	111	22.20	99	19.80	94	18.80	75	15.00
Total.....	100		102.25		91.15		89.25		86.80		81.00

The totals, or indices, have been reduced to chart form (shown in Fig. VI), in order to emphasize their movements.

Combined Statements

Comparing a series of statements with their own average position is important because it tells whether or not a company is advancing or falling back in credit strength.

It is **more important,** however, to discover **whether a company matches up in proportions** with its competitors, whether it is among the strong or the weak, whether it is above or below the average.

A further step consists of **consolidating many statements,** of contemporary date, **into one industry statement.** To make the figures readily usable this consolidated statement is then **reduced to what is called "A 100% Statement."** The process consists of dividing each item on the consolidated statement by the total footings so as to get the percentage each item bears to the total footings. This eliminates size and reduces the analysis to one of proportion. It is relatively easy, a matter of three or four minutes' computation, to reduce any single statement to a 100% basis. The relative proportions of its items can then be compared readily to the proportions of the trade consolidated statement, which is also expressed on the 100% basis.

In addition to establishing a typical trade statement, series of ratios are being selected each year in different lines of business. The average banker may have from five to ten statements in a single line of business that are comparable. The central office of The Robert Morris Associates accumulates as high as a hundred statements in one line and from a combined statement and from the use of the separate statements and their several ratios, selects what seems to be a reasonable percentage to expect for any one ratio.

An example of this is shown as developed in the wholesale grocery line.

Wholesale Grocers

100% Statement

No. of Names.....	56	108
As of December 31.....	1922	1923
Cash.....	4.16	4.94
Receivables.....	29.86	29.14
Inventory.....	42.30	41.63
Listed Securities.....	.80	.39

Miscellaneous	.41	.70
Total Current	77.53	76.80
Total Fixed	22.47	23.20
Total	100.00	100.00
Payables	30.27	30.84
Taxes	.67	.72
Miscellaneous	1.56	1.52
Total Current	32.50	33.08
Funded	.75	1.22
Total Debt	33.25	34.30
Reserves	.59	1.61
Net Worth	66.16	64.09
Total	100.00	100.00
Sales	245.11	242.38

Selected Ratios

Current	221	208
Merchandise-Receivables	138	139
Worth-Fixed	266	285
Worth-Debt	198	191
Sales-Receivables	793	832
Sales-Merchandise	562	581
Sales-Fixed	1043	1255
Sales-Worth	362	378

After accumulating the figures of some 108 names, the 100% statement was developed by dividing each item on the balance sheet by the total to find what percentage each item bore to the total. Thus, out of every $100 of total footings $4.94 was cash. The ratios are selected from an average of three figures as follows:

The first is the **actual arithmetic ratio** of the dollar statement.

The next figure is developed by **plotting the ratios** for each statement on a modal chart. This chart is a columnar affair with headings of equal frequencies for each individual ratio as shown on page 1218.

Thus a current ratio of 223 goes into a column headed 200-224, a sales-receivable ratio of 625 goes into a column on another chart headed 600-649. In this way what is known as a modal column is obtained. The mode itself is defined as the point around which the greatest number of figures concentrate. The average of this modal column is the second figure.

The third figure is the **median or middle item** when a series is placed in the order of their importance. Thus, in a series of 23 items, the twelfth is the median. These three, the arithmetic, the mode and the median, are averaged together to arrive at the selected ratio.

Formula for Selected Ratio

Average Modal Column	161
Median Figure	232
Ratio from Combined Statement	232
Total	625
Selected Ratio	208

The objection to the purely arithmetic figure is that the large statements have too much weight on the resulting ratio. The mode or median is not influenced by size but rather gives weight to concentration and centralization. The unusually good or unusually bad do not exert the influence on the selection that a purely arithmetic ratio would. The middle item or median has as many above as below and will not give undue importance to the larger companies.

These selected ratios and 100% statements are submitted to the members as backgrounds for measuring a credit risk. They cannot in any sense be considered yardsticks, but if a borrower's statement does not measure up to this background, it gives the credit executive an opening for asking questions. The explanation may be perfectly satisfactory and then again it may not be. If there is a wide discrepancy between the type figure and the customer's, such a comparison certainly gives an opportunity for asking the borrower the why and wherefore.

Wholesale Grocers—Current Ratios

Under 150	150	175	200	225	250	275	300	325	350	375	Over 375
85	157	195	218	240	254	279	323		351	388	607
143	165	199	207	248	268	294	321	335	363	395	431
149	167	185	214	*232	264	276	300	329	363	395	617
148	166	178	222	238	256	276	300		366	399	1500
149	163	197	210	228	262	280	312			379	1072
137	160	187	201	228	261	282				377	630
	166	178	219	225	267	282				386	702
	173	176	215	229	270	280				385	613
	152		212	228						391	443
	154		216								626
	160		221								572
	161		218								
	152		209								
	168										
	168										
	160										
	155										
	156										
	161										

There is an increasing number of requests for comparisons made with type figures which seems to indicate the value placed on them. Many banks use the ratios from year to year and find them exceedingly helpful.

To illustrate the use of these selected ratios, the table given below has been prepared comparing an individual company to the wholesale grocery business on a national basis.

The analyst glances first at the current ratio which seems quite satisfactory, and may be called a 2 for 1 ratio. Compared to the group it is very close to par, and not the least bit alarming. Notice, however, that the index number is only 87.30. The relationships of the ratios for the individual company have been compared to the group are found under the column marked "Relation." The weights assigned are arbitrary to a certain extent, in that they have been chosen according to our opinion of their importance, assigning 25% to Current and Worth-Debt as being the most important ratios and the Sales-Receivable

and Sales-Merchandise as next in importance. You may differ in your opinion of the importance of these various ratios and may re-arrange these weights, but they must equal 100. The relationship multiplied by the weight gives the value column which when added is the index number 87.30. This is 13 points below parity when compared to the industry and is subject to some question. Before pointing out the weaknesses, an explanation of the 185 in the relationship column may be in order.

This company has a very small investment in fixed assets which naturally makes the worth-fixed and sales-fixed ratios very high. In order to keep these extremely high ratios from influencing the index number to too great an extent the following formula is used.

Formula for adjusting relationship when the individual ratio exceeds the base ratio:

$$100 + 100 - \frac{\text{Base Ratio}}{\text{Individual Ratio}}$$

$$100 + 100 - \frac{285}{1847}$$

$$100 + 100 - 15 = 185$$

Using this trade statement as a base for comparison, the following is an example of how the index method may be applied:

Analysis of a Wholesale Grocer

As of December 31, 1923

	100% Statement Co. X	100% Statement Group
Cash	3.07	4.94
Receivables	41.32	29.14
Inventory	52.86	41.63
Listed Securities		.39
Miscellaneous		.70
Total Current	97.25	76.80
Total Fixed	2.75	23.20
Total	100.00	100.00
Payables	47.44	30.84
Taxes	.53	.72
Miscellaneous	1.22	1.52
Total Current	49.19	33.08
Funded		1.22
Total Debt	49.19	34.30
Reserves		1.61
Net Worth	50.81	64.09
Total	100.00	100.00
Sales	221.15	242.38

	Ratios Co. X	Ratios Group
Current	197	208
Merchandise-Receivables	127	139
Worth-Fixed	1847	285
Worth-Debt	103	191
Sales-Receivables	535	832
Sales-Merchandise	418	581
Sales-Fixed	8041	1255
Sales-Worth	435	378

	Wt.	Rel.	Value
Current	25	95	23.75
Merchandise-Receivables		91	
Worth-Fixed	5	185	9.25
Worth-Debt	25	53	13.25
Sales-Receivables	15	64	9.60
Sales-Merchandise	15	72	10.80
Sales-Fixed	5	185	9.25
Sales-Worth	10	114	11.40
	100	Index	87.30

This keeps the fluctuation above 100% equal to the fluctuation below 100. That is, the relationship of one number to another can fluctuate downward from 100 to 0, but can fluctuate upward from 100 to infinity. This formula then keeps the fluctuation between 100 and 200 for statements whose ratios are in excess of the base.

The company's outstanding weakness is its poor worth-debt ratio. The group shows a ratio of 191, almost twice as much of their own capital invested in the business as is furnished by the creditors. The individual relies to a 50-50 basis on his creditors, therefore, as a credit risk he is not so desirable, relying to a too great an extent on the goodwill of his creditors.

Another weakness is a poor sales-receivable ratio. The group shows 832 or a little better than 45 days, while the individual shows more than 60 days. This should be a lead to test the goodness of the receivables and the possibility of old accounts.

The sales-merchandise ratio is also below par, 72% of the group figure. A question concerning the freshness of its inventory would be in order here. If 108 companies show an average turnover of nearly six times, why doesn't this company? It may be due to purely local conditions and easily explained, but the background for the comparison is certainly an advantage.

There is little comment on the fixed ratios. The item is negligible, only 2.75 of the total footings and consequently given very little weight. It might have been better to have ignored them, but by giving the worth-fixed and sales-fixed ratios, each a weight of 5, the company appears even better than it probably is. Naturally if one takes 5 from a poor ratio and add it to a good one, he increases the index number.

Using 108 companies in the same line of business, we find that this individual company does not measure up to what seems reasonable to expect in this line of business. It is below standard in three very important ratios, the worth-debt, the sales-receivables, and sales-merchandise ratios. Such a condition is not

reflected by a casual glance at the current ratio and would probably not cause an alarm without barometrics as a background.

Bank Interest and Discount

INTEREST ON CALL LOANS.—The rates of interest on demand or call loans are not fixed when the loans are negotiated, as is done in the case of time loans. They fluctuate from day to day with the movements of the money market. If there is an agreement between lender and borrower that a loan will not be called until convenient for the borrower, the rate of interest will not vary greatly from that of a time loan. If there is no such agreement and the lender may call the loan whenever he wishes, the rate of interest will generally be slightly lower than that charged for a time loan. As the market rate fluctuates, the bank may simply notify the borrower that it desires to increase the rate, or the borrower may notify the bank that the market rate has dropped and that he wishes a corresponding lowering of his rate. Such action is termed **"marking up rates"** or **"marking down rates."**

INTEREST ON TIME LOANS.—Since the banker's assets are more liquid when his loans may be called at any moment, he usually allows slightly lower interest rates on call loans than on time loans. Generally, the later the date of maturity of a time loan the higher the rate is likely to be, since it becomes increasingly difficult for the banker to forecast what the condition of the money market will be at the time of the maturity of the loan.

FACTORS AFFECTING RATES OF INTEREST.—Rates of interest and discount vary with different banks and borrowers. Conditions of the money market, the credit standing of the individual borrower, and the bank's own resources, the condition of business in general, and geographic location, are the chief factors influencing rates of interest.

Condition of Money Market.—The condition of the money market is of prime importance. The amount of **money in circulation** and the **general level of prices** are indexes of the market. There are times when money is very plentiful and banks are eager and anxious to find borrowers. There are other times when money is almost impossible to obtain at any rate, as for example, during the financial crisis of 1907, when for a day or two, rates of interest on call loans in Wall Street reached the figure of 125% per annum. Extraordinarily high call money rates also prevailed during the inflation period immediately following the Great War.

Type of Borrower.—Rates may vary with individual borrowers. **New customers** will frequently be charged a higher rate than borrowers whose reputations have been long established. The banks consider the nature of the risks which they are assuming, ascertaining carefully the **uses to which borrowers are to put the funds.** They consider the type of the borrowers' businesses, the character of their management and their general reputation in the business world. **Small borrowers** must frequently pay higher rates of interest than larger borrowers because the banks incur more clerical expense proportionately in handling a number of small loans than in handling fewer large loans.

Bank Reserves.—Banks' reserves are generally **an index** to the rate they charge on loans. When the reserves are diminishing, the banks are less willing to accommodate borrowers. Borrowers, therefore, by watching carefully the state of bank reserves, may choose the most advantageous time for their loans. In the same way borrowers who wish to raise considerable sums may determine

Discount and Interest Rates prevailing in Various Cities

District Number and City	Customers Prime Commercial Paper						Interbank Loans			Loans Secured by Liberty Bonds		
	30–90 days			4–6 months								
	Week ending—		Month ending	Week ending—		Month ending	Week ending—		Month ending	Week ending—		Month ending
	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923
1. Boston	4½	4½	5	4½	4½	5½	4	4	5	4½–4¾	4¾	5½
2. New York	3½–5	3½–5	5½–5½	3½–6	3¾–5	5½–5½	4½–4¾	4 –4¼	5–5½	4 –5	4¼–4½	5 –5¼
Buffalo	5 –6	5½–6	6	6	6	6	5	5	6	5½–6	5 –6	6
3. Philadelphia	4 –4½	4 –4½	5½	4 –4½	4 –4½	5½	4 –5	4 –4½	5½	4 –4½	4 –4½	5½
4. Cleveland	5 –6	5½–6	6	5 –6	5½–6	6	5	5	5½	5 –6	5 –6	6
Pittsburgh	5 –6	5 –6	6	5 –6	5 –6	6	6	6	6	5 –6	6	6
Cincinnati	5½–6	5½–6	6	5½–6	5½–6	6	5 –5½	5 –5½	5	5 –5½	5½–6	5 –5½
5. Richmond	5 –5½	5	6	5½	5 –5½	6	4½–5	5	6	5 –6	4½–6	6
Baltimore	4½–5½	4½–5½	5½	4½–5½	4½–5½	5½	4½–5½	5	5½	5 –5½	.....	5½
6. Atlanta	5 –6	5 –6	6	5 –6	5 –6	6	5 –6	5 –6	6	4½–6	4½–6	5
Birmingham	5 –6	5 –6	6 –7	6 –7	5 –6	6	5 –6	5 –6	6	6	6	6
Jacksonville	3½–8	4½–8	7 –8	3½–7	4½–8	6 –8	6	5 –6	6 –7	5 –8	4½–8	6 –8
New Orleans	5 –6	4 –6½	6	5 –6	5 –7	6	4½–5½	4½–6	5½	5 –6	4½–6	5½
Nashville	6	6	7	6	6	7	6	6	7	5 –6	5 –6	6
7. Chicago	4 –5	4 –5	5½	4½–5½	4 –5	5½	5 –5½	5	5½	4½–5½	4½–5½	5 –5½
Detroit	4½–6	5 –6	6	4½–6	4½–6	6	4½–5½	4½–5	5½	4½–6	5 –6	6
8. St. Louis	3½–5	3½–5	5½	3½–5	4 –5	5½	5 –5½	4½–5½	5½	5 –5½	5 –6	5½
Louisville	6	6	6	6	6	6	5	5	5½	5	5	6
Little Rock	6	6	6	6	6	6	6	6	6	6	6	6
9. Minneapolis	4½–5	4½–5	5½	4½–5½	4½–5	5½	5½–6	5½	5½	.....	.....	5½
Helena	8	8	8	8	8	8	7	7	8	.....	.....	8
10. Kansas City	5 –6	5 –6	6	5 –6	5 –6	6	5 –6	5 –6	6	4½–6	4½–5	6
Omaha	4 –6	4½–6	6	4½–6	4½–6	6	5½–6	5½–6	6	5 –6	5 –6	6
Denver	4½–6	4½–6	.....	4½	4½–5	.....	6 –7	6 –8	.....	6	5½–6	.....
Oklahoma City	6 –7	6 –7	6½	6 –7	6 –7	7	6 –7	6 –7	6	6 –7	6 –7	7
11. Dallas	4 –6	4 –6	5¾	4 –6	5 –6	5¾	4 –6	4 –6	5½	4 –6	4 –6	6¼
El Paso	8	8	8	8	8	8	6 –8	6 –8	8	7 –8	8	8
Houston	5 –6	5 –6	6	5 –6	5 –6	6	4½–5	4½–5	5½	5 –6	5 –6	7
12. San Francisco	4½–5	4½–5½	5½	4½–5	4½–5½	5½–6	5 –6	5 –6	5½	5 –6	5 –6	5½–6
Portland	6	6	7	6	6	6	6	6	6	6 –7	6 –7	7
Seattle	6	6	7	6 –6½	6	6	6	6	6	6	6	7
Spokane	5 –7	5 –6	7	6 –7	6	6	6	6	7	6	6 –7	7 –8
Salt Lake City	6	6 –7	7	4 –6	6 –7	7	6 –7	6 –7	6	6	6 –7	6
Los Angeles	6	6 –7	6½	6 –7	6 –7	6¼	6	6	6	6 –7	6 –7	6½

Discount and Interest Rates Prevailing in Various Cities—(Continued)

District Number and City	Loans Secured by Stocks and Bonds						Loans Secured by Warehouse Receipts			Cattle Loans		
	Demand			Time								
	Week ending—		Month ending	Week ending—		Month ending	Week ending—		Month ending	Week ending—		Month ending
	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923	Oct. 15, '24	Sept. 15, '24	Oct. 15, 1923
1. Boston	3	3	5	4¾	4¾	5½	.....	.....	.....	.....	.....	.....
2. New York	2½–4¾	2 –4¾	5 –5½	4½–5	3½–4¾	5½–6	4 –5	4 –4½	.....	.....	.....	.....
Buffalo	5 –6	5 –6	6	5 –6	6	6	6	6	.....	.....	.....	.....
3. Philadelphia	3½–5	4	5½	3½–4	3½–4	5½	4½–6	4½–6	5½	.....	.....	.....
4. Cleveland	6	6	6	6	6	6	5½–6	5½–6	6	.....	.....	.....
Pittsburgh	5 –6	5 –6	6	5 –6	6	6	6	6	6	.....	.....	.....
Cincinnati	5½	5 –5½	5½–6	5½–6	5½–6	5½–6	6 –7	5½–7	6	.....	.....	.....
5. Richmond	5 –6	5 –6	6	5 –6	5 –6	6	5½	5	6	.....	.....	.....
Baltimore	4½–5½	4½–5½	5¾	4½–5½	4½–5½	5¾	5 –5½	5½–5¾	6	.....	.....	.....
6. Atlanta	5 –6	5 –6	6	5 –6	5 –6	6	5 –6	5 –6	6	.....	.....	.....
Birmingham	6	6	8	6 –7	6	6 –7	6	6	6 –7	.....	.....	.....
Jacksonville	6 –7	5 –8	6 –8	6 –8	5 –8	6 –8	4½–7	5 –8	7 –8	.....	.....	.....
New Orleans	5 –6	5 –6	6	5 –6	5 –6	6	5 –7	5 –7	6¼	.....	.....	.....
Nashville	5½–6	5½–6	.....	5½–6	5½–6	7	5½–6	5½–6	7	.....	.....	.....
7 Chicago	4 –6	4 –5	5½	4½–5	4½–5½	5½	5 –6	4½–5	5½–6	5 –6	5 –5½	5½
Detroit	4½–6	4½–6	6	5 –6	5 –6	6	5 –6	5½–6	6	.....	.....	.....
8. St. Louis	4 –5½	4 –5½	5½	4 –5½	4½–5½	5½–5¾	4½–5½	5 –6	6	6	6	6
Louisville	6	6	6	6	6	6	6	6	6	.....	.....	6
Little Rock	6	6	6	6 –7	6 –7	6	6 –7	6 –7	6	6 –7	6	7
9. Minneapolis	4½–5½	4½–5½	5½	4½–6	4½–5½	5½	.....	.....	5¼	.....	.....	6½
Helena	.....	.....	8	8	8	8	.....	.....	8	8	8	8
10. Kansas City	5 –6	5 –6	6	5 –6	5 –6	6	5 –6	5 –6	6	6 –7	6 –7	6
Omaha	.....	.....	.....	.....	.....	5½	6 –7	6 –7	7	6 –7	6 –8	7
Denver	5½–7	5½	.....	5½–6	5½–6	.....	6 –8	6 –7	.....	6 –8	6 –7	.....
Oklahoma City	6 –7	6 –8	7	6 –7	6 –7	8	6 –8	6 –8	8	7 –8	7 –8	8
11. Dallas	5 –7	6	6¾	5 –8	6 –7	6¾	5 –7	5 –8	6½	7 –8	7 –8	7¼
El Paso	8	8	8	8	8	8	8	8	8	8 –10	8 –10	8
Houston	5 –6	5 –6	7	5 –6	5 –6	7	5 –6	5 –5½	7	6 –8	5 –8	8
12. San Francisco	5 –6	5 –6	5½–6	5 –6	5 –6	6	6	6	6	.....	.....	.....
Portland	6 –7	7	6	6 –7	6 –7	7	6 –7	6 –7	7	6	6	6½
Seattle	6	6	6	6 –7	6	7	6 –7	7	7	.....	6	6
Spokane	8	8	7	7	6 –7	7	7	6 –7	7	6 –7	6 –7	6 –7
Salt Lake City	6	7	7	5 –7	7	7	7	7	7	7 –7½	7½–8	7
Los Angeles	6 –7	6 –7	6	7	6 –7	6½–6⅝	7	6 –7	6¾	7	7	7

Range of Rates for Money in New York Annually, 1915 to 1924

	1915				1916				1917				1918				1919			
	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec.
Call loans	1½–3	3	1	1½–2½	1½–3	15	1½	2½–15	1½–3	10	1¼	3 –6	2½–6	6	2	3½–6	3¾–6	30	2	5½–25
Time loans (60 days)	2½–3½	3½	2¼	2¼–2½	2½–2¾	4½	2½	4 –4½	2½–4	5¾	2½	5¼–5½	5 –6	6	5	5½–6	5 –5½	7	5	6 –7
Commercial (2-name)	3½–4	4	2¾	3 –3¼	3 –3¼	4¼	3	3¾– ¼	3¼–4¼	5¾	3¼	5¼–5¾	5¼–5¾	6	5¼	5½–6	5 –5¾	6	5	5¾–6

	1920				1921				1922				1923				1924			
	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range for Dec.	Range for Jan.	High	Low	Range to Oct.
Call loans	6 –20	25	5	6 –7	6 –8	9	3½	4½–6	3 –6	6	2¾	3¾–5¼	3½–5¼	6	3½	4½–6	3¾–6	6	2	2 –3
Time loans (60 days)	7 –8	8¾	7	7 –7½	6 –7½	7½	5	5 –5¼	4½–5¼	5¼	3¾	4¾–5	4½–5	5¾	4½	4¾–5	4½–5	5	2	2¼–2¾
Commercial (2-name)	6	8	6	7¾–8	7½–8	8	5	5 –5¼	3¾–4	5¼	3¾	4½–4¾	4½–4¾	5¼	4½	4¾–5	4¾–5	5	3	3 –3¼

whether their loans can be secured from one bank or if they will have to resort to several banks.

The Business Cycle.—Rates are generally **highest when prices are rising** and the business cycle is approaching the point of greatest prosperity. During **periods of depression** money becomes "cheap" and the banks are eager to find borrowers, offering loans at the lowest possible rates. There is also a yearly cycle, when the money market changes from season to season as money is in demand for the planting or harvesting of crops and their transportation to the market.

Geographic Location.—The Federal Reserve Board has sought to standardize discount rates throughout the country by means of the Federal Reserve System, but there are still wide fluctuations which depend largely upon location. **Rates in large cities** and business centers are usually lower than those in the outlying districts. In the **southern and far western states** rates are usually in the neighborhood of 1 to 2% higher than in the East. The lowest prevailing rates are generally to be found in great centers like New York or Chicago. There borrowers are offered a wider market in which to secure funds. Astute financial managers will take advantage of these varying rates and—all other factors being equal—secure for their concerns the benefit of minimum rates.

DISCOUNT AND INTEREST RATES IN LEADING CITIES.—The table of discount and interest rates, given on pages 1222 and 1223, is taken from the annual report of the Comptroller of the Currency.

Comparison of the range of rates for call loans, 60-day time loans, and two-name commercial paper loans in New York annually for 1915 to 1924, is shown in the statement on page 1224, taken from the annual report of the Comptroller of the Currency.

Selecting a Bank

The exercise of intelligent selection in making banking connections is frequently neglected. Sometimes the location of the business does not permit of much choice. Where, however, a selection can be made from among several banks, it would be well for financial executives to consider the **reputation, size, location, type** and **service** of the various banks and select the one which will best serve the needs of their businesses.

REPUTATION OF BANK—ANALYSIS OF ITS STATEMENT.—The financial executive should be able to **read a bank statement** and make a personal analysis of the strength of the bank. In analyzing the statement of a bank the first and foremost consideration is the **relative liquidity of the assets.** Is the bank in a position to meet without embarrassment its obligations, which consist mostly of deposits payable on demand? To answer this it is necessary to determine, in the first place, whether the bank is maintaining a **sufficient reserve,** as the term is used in banking, meaning cash or its equivalent.

Reserve.—The **legal reserve** of a national bank can only consist of deposits in the federal reserve bank. However, the actual reserve includes in addition cash in vault and deposits in banks in reserve or central reserve cities. Demand deposits on the other hand include all demand obligations—deposit accounts (both individual and bank) subject to check, demand certificates of deposits, outstanding cashiers' and certified checks. The amount of the actual reserve should be compared with this total of demand obligations.

The bank's **legal lending power** depends upon the ratio of its **legal reserve**—federal reserve bank deposit—to its net demand deposits which include all

deposit accounts and certificates of deposit payable within 30 days. **Net demand deposits** for this purpose are determined by deducting from the gross figure balances due from banks other than the federal reserve bank and foreign banks, "our checks," and checks on other banks, including clearing house exchanges. If the "Due from banks" item exceeds the "Due to banks," both are dropped from the calculation. In the case of a country bank the federal reserve bank deposit should be 7% of the net demand deposits; in the case of a reserve city bank, 10%; and in the case of a central reserve city bank, 13%. Otherwise a reserve deficit results, or a margin of reserve below the minimum required.

The bank must also carry a legal reserve of 3% against its time deposits which as defined by law consist of deposit accounts and certificates of deposit payable in thirty days or more. This requirement is the same for all three classes of national banks—country, reserve city, and central reserve city.

Loans and Discounts.—The bulk of the remaining assets of the bank should consist of loans and discounts, principally **self-liquidating commercial paper** running not much over six months, and so distributed as to maturity that some are constantly falling due. A good proportion of these commercial holdings should be paper eligible for rediscount at the federal reserve bank and thus serve as a **secondary reserve. Loans on real estate,** not being of the self-liquidation character are not the best type of bank loans, and the power of national banks to make such loans is sharply defined and restricted by law. Of course, the quality of a bank's loans cannot be judged from its statement.

Bonds.—Bond holdings should be relatively small. This rule is frequently violated by small country banks. Generally, no harm results in individual cases, but if all banks followed the practice it would result in a most perilous situation. Such banks as operate counter to this rule can do so merely because the rank and file of banks, particularly institutions in the larger cities which carry the accounts of country banks, practice more conservative methods in this respect. A national bank is prohibited by law from owning **corporate stocks** except stock in a federal reserve bank, and in a bank organized by a national bank for the purpose of financing foreign trade, unless acquired as collateral against a defaulted loan, in which case the stock must be disposed of as soon as market conditions permit.

Relation of Loans to Deposits.—The relation of loans and discounts to deposits is subject to much misunderstanding. It is generally thought that a bank is favorably situated if its deposits tend to exceed its loans and discounts. This does not necessarily follow. Such excess may result from the bank putting more of its funds into bonds or real estate and less into loans, so that its position becomes less liquid. Banks carrying large amounts of bonds invariably show a great excess of deposits over loans. During the war when the banks of the country were buying large amounts of Liberty bonds for their own account, the proportion of aggregate deposits to loans tended to increase, but no one with any knowledge of banking would contend that this signified an improvement in the banking situation. Only if the relative reduction in loans results in an increase of reserve, does such reduction mean a betterment of the bank's position.

Fixed Assets.—The remaining assets of a bank comprise such items as banking house, furniture, fixtures, etc. Being of a fixed nature they should constitute a very **small proportion of the total.** They should be compared with the bank's net worth—capital stock, surplus, and undivided profits—and should not amount to more than, say, 20% of that net worth. If the item

"Other real estate" appears in the statement, it should be scrutinized closely, as such holdings have been acquired as the result of default in payment of loans. A national bank may own only the building it occupies, and any other realty, acquired on defaulted loans, must be disposed of at the earliest opportunity. Some banks own buildings which form too large a part of their assets.

Note Circulation.—The note circulation of a national bank is a negligible item so far as the analysis of the bank's statement is concerned. Its amount is **relatively small** and it is protected by the pledge of United States Government bonds and by the 5% redemption fund, both deposited with the Federal Government in Washington, D. C.

Relation of Capital Items to Deposits.—Deposits should not exceed, normally at least, a certain proportion to the sum of capital stock, surplus, and undivided profits. Several years ago the Comptroller of the Currency recommended the passage of a law limiting deposits to 8 times the aggregate net worth. The stockholders' double liability should be borne in mind. It is safer on that account to deposit in, or loan to a bank whose net worth is represented chiefly by capital stock than to one which has a small capital stock but a large surplus.

Lending Power of a Bank.—A bank loan or discount in essence consists of an exchange of the bank's promise to pay legal tender money on demand for the borrower's promise to repay such money, usually at the end of a stated period. The exchange is advantageous to the borrower on account of the bank's enjoying a better credit standing with the general public, which accepts its demand obligations in ordinary transactions as the equivalent of legal tender money, that is, as so much cash. The bank's promise to pay may take the form of **engraved notes,** the so-called "bank notes," or far more generally in this country, the form of a so-called **deposit,** which is nothing more nor less than an account payable of the bank. This explains the phenomenon frequently witnessed that the aggregate deposits of the banks of the country rise and fall with their aggregate loans and discounts though not in absolute unison. It is evident that in making a loan a bank **lends its credit.** The fundamental difference between such a loan and a bank acceptance is that in the first case the bank lends **its demand credit,** and in the other case it lends **its time credit;** that is to say, in the first case it promises to pay on demand, while in the second case it promises to pay at a stipulated future date.

As the lending power of a bank must refer to the amount of these demand promises to pay it may issue, whether in the shape of engraved notes or deposits, it is obvious that that power depends upon the bank's credit standing which will depend in turn on the same factors as the credit standing of any business concern. Apart from the law regulating reserves, note issue, etc., a bank's, lending power is, therefore, determined by the following:

1. The integrity and capacity of its management, chiefly with reference to making sound loans of the proper duration.
2. The liquidity of its assets, which is measured chiefly by the ratio of its reserve to its demand liabilities.
3. The relation of its net worth to its deposits, notes, and other liabilities.

It is incorrect to state that the lending power of a bank is represented by the sum of its deposits, outstanding notes, and net worth items (capital stock, surplus, and undivided profits). The deposits and notes arise mostly out of the loans the bank is already carrying and therefore represent expended lending power. Furthermore, never gauge the strength or soundness of a bank by the volume of deposits or the total resources. Deposits are the bank's liabilities and if they increase as the result of loans, other things being equal, the bank's

position grows weaker. They are really the bank's accounts payable, and the strength of the bank should not be judged by their volume, any more than the soundness of an industrial concern is judged by its accounts payable. The same applies to total resources considered in the same connection, since they will grow as deposits grow. Of course, the bank becomes stronger if the deposit liabilities result from deposits of cash, but that is because of the cash and not the resulting deposit liability.

Nor does a bank lend its capital stock, surplus and undivided profits. These simply represent the stockholders' proprietary interest in the bank, or its net worth, and their aggregate amount is affected only by earnings, special profits, new stock subscriptions and special contributions—not by any loans made by the bank. They serve as a margin of safety for the protection of the bank's creditors, its note-holders and depositors.

Overdrafts.—The factors reviewed in the foregoing are the major considerations to be taken into account when determining the soundness of a bank from its balance sheet. Certain minor items among the assets and liabilities may also be studied with profit. One of such is the item of "overdrafts" among the assets. It in reality represents **involuntary loans** made by the bank, and needless to say, a large amount of "overdrafts" is an indication of rather loose management on the part of the bank.

Rediscounts and Bills Payable.—Rediscounts and bills payable due the federal reserve bank in emergencies or in seasons when the bank is subject to heavy demands from its customers for perfectly legitimate reasons, such as crop moving, are, of course, not a cause for any apprehension. However, if these liabilities remain heavy the year round, it is a sign that the bank is overextended. The same is true of bills payable representing borrowings from banks in the larger cities. The bank's **contingent liability** on rediscounts with the federal reserve bank should always be borne in mind. Also the fact that against its bills payable the bank is usually obliged to pledge some of its assets —Liberty bonds or commercial paper.

Acceptances.—The larger banks extend acceptance or time credits—that is, they accept bills of exchange for customers who in turn obligate themselves to reimburse the bank for the amount of the acceptances when they are due. With the consent of the Federal Reserve Board, a national bank may accept up to 100% of its unimpaired capital and surplus. At the peak of the demand for such accommodation, representing a seasonal fluctuation, 100% is not excessive. At other seasons, however, the amount might be considerably less with advantage. English banks are considerably more conservative in this regard than American banks, not allowing their acceptances to exceed 50 or 60% of their capital stock and surplus. Some of the large American institutions suffered not a little embarrassment during 1921 on account of the large volume of acceptances they had issued. The foregoing holds true of the liability assumed under letters of credit, which are simply the bank's promises to pay or to accept a bill of exchange at some future time.

Comparative Study.—It is difficult to judge the position of a bank from a single statement. A comparative study should be made over a number of years so as to determine the **trends in the bank's activities.** Taking a particular bank, its statement might also be compared with those of other banks in the same community and therefore doing more or less the same class of business. It might in fact be advantageous to average the various ratios for the several banks and thus establish standards that would afford some basis of comparisons in the case of a particular bank. However, each bank must

National Bank Loans to Single Borrowers

Character of Loans	Amounts Loanable
(A) Accommodation or straight loans, whether or not single name.	Maximum limit, 10% of bank's paid-up and unimpaired capital and surplus.
(B) "Bills of exchange drawn in good faith against actually existing values." The law expressly provides that this phrase shall also include: (a) Drafts and bills of exchange secured by shipping documents conveying or securing title to goods shipped. (b) Demand obligations, when secured by documents covering commodities in actual process of shipment. (c) Bankers' acceptances of the kinds described in Section 13 of the Federal Reserve Act.	No limit imposed by law.
(C) Commercial or business paper (of other makers) actually owned by the person, company, corporation or firm negotiating the same.	No limit imposed by law.
(D) Notes secured by shipping documents, warehouse receipts or other such documents, conveying or securing title covering readily marketable non-perishable staples, including live stock. No bank may make any loan under (D), however, (a) Unless the actual market value of the property securing the obligation is not at any time less than 115% of the face amount of the note, and (b) Unless the property is fully covered by insurance, and in no event shall the privilege afforded by (D) be exercised for any one customer for more than 6 months in any consecutive 12 months.	15% of bank's capital and surplus in addition to the amount allowed under (A); or if the full amount allowed under (A) is not loaned then the amount which may be loaned in the manner described under (D) is increased by the loanable amount not used under (A). In other words, the amount loaned under (A) must never be more than 10%, but the aggregate of (A) and (D) may equal, but not exceed, 25%.
(E) Notes secured by not less than a like face amount of bonds or notes of the United States issued since April 24, 1917, or by certificates of indebtedness of the United States.	10% of bank's capital and surplus, in addition to the amount allowed under (A), or if the full amount allowed under (A) is not loaned, then the amount which may be loaned in the manner described under (E) is increased by the loanable amount not used under (A). In other words, the amount loaned under (A) must never be more than 10%, but the aggregate of (A) and (E) may equal, but not exceed, 20%.
(F) Notes secured by U. S. Government obligations of the kinds described under (E) the face amount of which is at least equal to 105% of the amount of the customer's notes.	No limit, but this privilege, under regulations of the Comptroller of the Currency, expired December 31, 1920.

regulate the liquidity of its assets more or less in accordance with its own individual experience with respect to the withdrawal of deposits.

SIZE OF BANK.—In selecting a bank, the borrower's first consideration should be to determine that the bank **is large enough** to accommodate him to the full extent of his needs. On the other hand, a very small borrower in New York City, for instance, might receive better attention and service from a smaller bank in his vicinity. It should be borne in mind that size does not always mean strength. The **lending limit of the bank** should also be ascertained. If the bank is a state bank, the state banking laws apply. If the bank is a national bank, then the lending limits are determined by the federal statutes.

LENDING POWERS OF NATIONAL BANKS.—The amounts which a national bank may properly lend to any one person, company, corporation or firm (including in the liability of a company or firm, the liabilities of the several members thereof) are stated in terms of the percentage of the paid-up and unimpaired capital stock and surplus of the lending bank as shown on page 1229.

Illustrations of what a national bank may lend at any one time to any one customer, expressed in terms of the percentage of its capital and surplus follow:

	Illustration 1	Illustration 2	Illustration 3
(A) Accommodation or straight loans	10%	5%	5%
(D) Notes secured by warehouse receipts, etc.	15%	20%	15%
(E) Notes secured by a like face amount of Government obligations	10%	10%	15%
Total	35%	35%	35%
(B) Bills of exchange drawn against actually existing values	No limit imposed by law.		
(C) Commercial or business paper	No limit imposed by law.		
(F) Notes secured by at least 105% of U. S. Government obligations	No limit imposed by law.		

LOCATION OF THE BANK.—Generally it is advisable for the borrower to select a bank which is located fairly close to his place of business. There is considerable saving of time in the trips made by him or his employees between his office and his bank. The **hazards due to loss or robbery** are lessened.

SPECIALIZED BANKS.—There has lately been a tendency among banks to specialize in making **certain types of loans.** Some banks make a practice of giving special service to certain types of businesses or businesses engaged in special industries or trades. Others specialize in the handling of certain classes of collateral. There may be distinct advantages to be gained in doing business with a bank thoroughly acquainted with the borrower's type of business or with the kind of collateral which he offers as security for his loan.

MEMBER OF THE FEDERAL RESERVE BANKS.—The borrower should thoroughly acquaint himself with the particular advantages that might be gained from doing business with a bank which is a member of the Federal Reserve System. These banks are **under the careful supervision** of the Federal Reserve Board. Every effort is made to keep their assets thoroughly liquid by means of the **rediscounting function** of the regional Federal Reserve bank. The banks of the Federal Reserve System have **special facilities for transfer of funds** to distant points expeditiously and economically.

THE SERVICE FUNCTION.—Some banks offer attractive services in the way of safe-keeping securities, collecting coupons, and preparing income tax

returns, reports, etc. Most bankers will gladly furnish advice on matters concerning the financial management of business. The borrower often finds such services a valuable aid.

One of the most important services rendered by modern banks to businesses in general is offered by the **commercial and industrial service departments.** These departments are composed of accountants, engineers, economists and other experts, who make a study of business conditions in general and of businesses individually. They travel about the country investigating the affairs of clients of the banks and of prospective borrowers. The data which they compile is used to supply the bank with valuable credit information and to assist customers and clients of the bank in conducting their businesses. The bank is assisted in determining when loans may be safely granted. The customer, on the other hand, is given valuable information and statistical data covering his entire industry and referring to such important matters as cost of production, proportion of items making up cost, profit, labor supply, labor conditions in the plant, system of cost finding, prices, and management.

These departments are also called upon to assist clients who have fallen into financial difficulties and are unable to meet their obligations at maturity.

NATURE OF SERVICE RENDERED.—The development of industrial and commercial service is of a comparatively recent date. Some banks have developed these services to a considerable extent and have so organized them that their customers are supplied with useful information whenever they ask for it. In some instances the banks go no further than to collect useful information on trade and financial conditions for the purpose of distributing it to their clients for the asking. Some of the larger and more progressive banks issue **monthly bulletins** in which are set forth comprehensive surveys of financial, trade and industrial conditions.

The banks' industrial and commercial service departments are called upon to assist the individual borrower, who receives the benefit of all the experience these departments have had in dealing with other clients in similar positions.

A third type of commercial and industrial service is that rendered as a result of the **banks' investigations through their credit departments.** In making loans of considerable magnitude banks make a deeper analysis than could be made by a mere study of the balance sheet. Such investigations often enter into the most minute details of the business activities of their clients, such as the location of the factory with respect to their trade, their raw material, labor supply, labor conditions in the plant, relation of management to labor, cost-finding methods, relation to the trade, type of product, and a great many other phases of the problems entering into commercial, industrial and financial management of business.

As a result of the banker's investigations the most intimate details of the borrower's business come to his knowledge and are held in confidence by him. Nevertheless, from such close business contact, the banker is in a position to advise different clients more effectively by his intimate knowledge of the experience of other concerns under similar difficulties.

Trade Acceptances

USE OF TRADE ACCEPTANCE ILLUSTRATED.—Since the inauguration of the Federal Reserve System, the trade acceptance (Fig. 1) has returned to more general use. It has been defined as "a time draft or bill of exchange drawn by the seller of goods on the buyer for the purchase price, and accepted by the

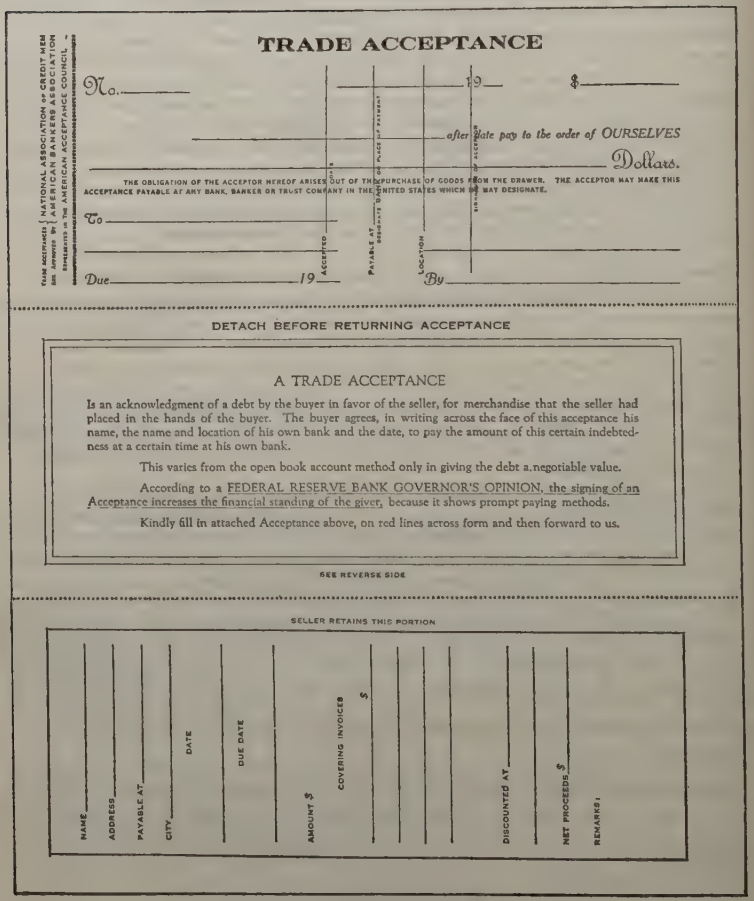
TRADE ACCEPTANCE
No.
19
$
after date pay to the order of OURSELVES
Dollars.
THE OBLIGATION OF THE ACCEPTOR HEREOF ARISES OUT OF THE PURCHASE OF GOODS FROM THE DRAWER. THE ACCEPTOR MAY MAKE THIS ACCEPTANCE PAYABLE AT ANY BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH HE MAY DESIGNATE.
To
Due 19
ACCEPTED
PAYABLE AT (designate by name place of payment)
LOCATION
By
DETACH BEFORE RETURNING ACCEPTANCE
A TRADE ACCEPTANCE
Is an acknowledgment of a debt by the buyer in favor of the seller, for merchandise that the seller had placed in the hands of the buyer. The buyer agrees, in writing across the face of this acceptance his name, the name and location of his own bank and the date, to pay the amount of this certain indebtedness at a certain time at his own bank.
This varies from the open book account method only in giving the debt a negotiable value.
According to a FEDERAL RESERVE BANK GOVERNOR'S OPINION, the signing of an Acceptance increases the financial standing of the giver, because it shows prompt paying methods.
Kindly fill in attached Acceptance above, on red lines across form and then forward to us.
SEE REVERSE SIDE
SELLER RETAINS THIS PORTION
NAME
ADDRESS
PAYABLE AT
CITY
DATE
DUE DATE
AMOUNT $
COVERING INVOICES
$
DISCOUNTED AT
NET PROCEEDS $
REMARKS
TRADE ACCEPTANCES | NATIONAL ASSOCIATION OF CREDIT MEN
SEE SUPPORTED BY | AMERICAN BANKERS ASSOCIATION
APPROVED BY THE AMERICAN ACCEPTANCE COUNCIL

FIG. 1. Trade Acceptance

buyer, payable on a certain date at a designated place." The seller of goods draws a 30, 60, or 90-day draft on the buyer for each transaction or group of transactions, according to the terms of sale. The buyer writes across the face of the draft, "Accepted (date), payable at.....Bank," signs it and returns it to the seller. It may be held by the latter until maturity or taken to his bank to be discounted. By this method the seller gains the use of funds which would otherwise be tied up in open-book accounts. Also, the trade acceptance is negotiable evidence of the transaction, defining the rights and obligations of the parties and setting a definite day for payment, a great advantage to the seller. The buyer may arrange with the bank to make partial payments on account of the trade acceptance, thereby enjoying one of the chief conveniences of the open-account system. Trade acceptances discounted by a bank which is a member of the Federal Reserve System may be rediscounted with the Federal Reserve bank of the district, provided the date of maturity is not more than 90 days ahead.

TRADE ACCEPTANCE DISTINGUISHED FROM OTHER INSTRUMENTS.—

Commercial Drafts.—Trade acceptances are presented to buyers for acceptance when goods are sold, whereas ordinary commercial drafts are usually drawn upon slow paying customers whose accounts are past due. The former represent completed current business transactions and the latter past transactions.

Notes Receivable.—Notes receivable are one-name paper issued to close out past due accounts or issued in place of open accounts in those lines of business where notes are the basis of credit. Trade acceptances are essentially two-name paper drawn on the buyer by the seller, whereas, notes receivable are one-name paper issued by the buyer. This difference, however, is slight since notes receivable become two-name paper upon endorsement by the payee.

Bank Acceptances.—Bank acceptances are drafts or bills of exchange accepted by banks and are used for extending **bank credit** to business men while goods are in process of production or in transit in domestic or foreign commerce. Trade acceptances are accepted by merchants and indicate that goods have been sold and payment will be made at the maturity of the instruments.

HOW TO USE TRADE ACCEPTANCE.—The trade acceptance may accompany the invoice, may be mailed afterwards, or, in cases of active accounts, may accompany the monthly statement and cover the total amount of invoices rendered during the month. The buyer who receives the trade acceptance may either decide to discount the bill and ignore the trade acceptance, or if he desires to make payment at maturity, he may "accept" the trade acceptance.

Upon receiving properly "accepted" trade acceptances, the seller may use them for borrowing purposes either by presenting them to his own bank for discount or by selling them in the open commercial paper market. Otherwise he will hold such acceptances and in due time before maturity, depending upon the location, he will forward them for collection through his bank to the banks designated in the acceptances. According to law, the place of payment of a trade acceptance is at the office of the acceptor, unless a definite place be designated on its face, such as the acceptor's bank—this being the usual method.

To be **eligible for purchase by or discount at a Federal Reserve bank,** a trade acceptance should bear *prima facie* evidence that it is drawn by the seller on the purchaser of goods sold and must have a maturity, at time of purchase or discount, of not more than 90 days, exclusive of days of grace, excepting that if drawn for agricultural purposes or against sale of live stock, it may have a maturity at time of discount of not more than 6 months, exclusive of days of grace.

TRADE ACCEPTANCES AND TURNOVER.—E. W. Shepard, General Credit Manager, Western Electric Co., New York, says: "One of our primary reasons for the adoption of trade acceptances was because we knew that trade acceptances, especially when discounted would increase our turnover and therefore improve our net return.

"After nearly 5 years' use of trade acceptances we are convinced that they are a factor in speeding up turnover. During that period we have improved our turnover approximately 25%; we know that about 10% of the increase is directly due to the use of trade acceptances, but there has also been an indirect benefit in the effect of speeding up collections.

"Terms in the electrical industry are too short for us to increase the volume of acceptances to a great extent. Terms are usually 30 days' net with allowances of cash discounts for payment in 10 days. But in any line of business where the terms are 60 days or longer, and especially in those industries where future datings are given, the trade acceptance should have a great future.

"Too many manufacturers and jobbers are performing banking functions and have done so for a long time. Changing from the much abused open account system to selling on trade acceptance terms, and then discounting the acceptances simply means transferring the banking function to the banks where it rightfully belongs, and gives the banks better security in the shape of two-name paper.

"The purchaser who buys on an acceptance basis is also placed in a more enviable position. He is able to buy from the concern equipped to give him the best products, prices and service. He has not mortgaged his future by always feeling obligated to one major supplier for performing both a merchandising and banking service."

ADVANTAGES OF USE OF TRADE ACCEPTANCES.—Arguments advanced in favor of the use of trade acceptances may be summarized as follows:

To the Seller.—1. Trade acceptances **establish the correctness of the amount of the indebtedness** of the purchaser.

2. Trade transactions can be financed more economically when open book accounts are replaced by trade acceptances which can be discounted to obtain money to carry on more business. Trade acceptances bring full value less discount, whereas loans on open book accounts seldom bring more than 70 to 75% of the face value of the accounts.

3. The **costly cash discount** and the attendant friction caused by the attempts of some buyers to take discounts after the cash discount period has elapsed is **done away with** by the use of trade acceptances.

4. **Bad debts are reduced** because acceptors of trade acceptances, payable through local banks, hesitate to injure their credit by dishonoring them. Open accounts are more likely to remain unpaid at maturity and develop into bad debts.

5. With the use of trade acceptances there is less likelihood that customers will abuse the privilege of returning goods or make excessive claims, for damages, than with the use of the open account system.

To the Buyer.—1. **Buyer's credit standing** is raised by the use of trade acceptances. By meeting their trade acceptances at maturity they establish their credit standing with their bankers as well as with their trade creditors.

2. The use of trade acceptances tends to develop **greater efficiency** in buyers. They thereby can arrange their purchases better to coordinate with their sales. They will make greater efforts to collect on their sales in order to meet their own trade acceptances.

To the Banker.—1. Trade acceptances are a **desirable** form of commercial paper **for discount purposes.** They are two-name paper and hence afford more security for repayment at maturity than single-name paper.

2. Trade acceptances **represent current transactions** which are self-liquidating, one of the requisites of ideal commercial paper.

3. The **rediscount feature** of trade acceptances cannot be overlooked in periods of commercial activity. The Federal Reserve banks will rediscount such paper for local banks when the banks have exhausted their own funds for lending purposes.

4. There is **no limit upon the amount** of trade acceptances which a national bank may discount for any one customer.

ARGUMENTS AGAINST TRADE ACCEPTANCES.—The arguments presented by those opposed to trade acceptances may be summarized as follows:

1. Trade acceptances cannot be used advantageously where the prevailing terms of sale are for cash.

2. In those lines of trade where long terms of credit are customary it is not desirable at times to use trade acceptances. Under the regulations of the Federal Reserve Board trade acceptances for rediscount purposes cannot run longer than 90 days.

3. In many instances the trade acceptance may **tend to make the terms of payment longer.** Customers who would otherwise pay promptly to obtain the cash discount will be placed on a time basis by the use of trade acceptances.

4. The **open account method** has the advantage of being **elastic in making adjustments** for goods damaged in transit or returned on account of differences in kind or quality from that ordered. The use of trade acceptances does not lend itself to such adjustments.

5. The discount for early cash payment under the open book discount system is looked upon by purchasers as more desirable than time payments through the use of trade acceptances.

6. Trade acceptances in themselves do not avoid bad debts but are merely a means of improving trade relations in that they serve to arrange particular terms of payment. Bad debts are the result of lax methods of credit extensions, and poor management, which cannot be corrected by the use of trade acceptances.

7. Banks in discounting trade acceptances take into consideration, first, the financial condition of the borrower and then that of the acceptor. The banks **look to the drawer rather than the acceptor** for security. In view of this, little if any more credit can be obtained by the use of trade acceptances than can be obtained by the borrower on his own note.

8. Trade acceptances have been **subjected to certain abuses** which have given them an undesirable reputation. Among these abuses are renewals at maturity and accommodation acceptance arrangements. These practices do not represent commercial transactions or the best credit risks, the promotion of which is the primary purpose of trade acceptances.

9. Trade acceptances are not acceptable for use in those lines of trade in which **liens are retained on goods,** or in which there are **conditional sales** and title does not pass. The taking of trade acceptances may be interpreted as a waiver of the lien or the passing of title to the goods to the acceptor. Consequently, trade acceptances are **not used to finance consignment, instalment, or other conditional sales.**

10. Dangerous **pyramiding of credit** is one of the possibilities of extended discounting of trade acceptances for the same merchandise. Where, however, the trade acceptances are held by the drawers and not discounted, this con-

dition would not be brought about. Where the same goods are subject to different processes in successive stages of production by different manufacturers, and each draws a trade acceptance for the maximum of time and amount which in turn is discounted, the same merchandise will serve as the basis of a series of credit transactions. The merchandise may have passed through the hands of several dealers before the trade acceptances they have issued become due. If this is carried on extensively, there will result a **credit inflation** which for business in general is economically unsound.

PRESENT STATUS OF TRADE ACCEPTANCES.—The trade acceptance does not seem to have attained the popularity or general use hoped for by its advocates. For several years after the inauguration of the Federal Reserve System the use of trade acceptances had a rapid development, but it now seems to be declining somewhat and the open account method of financing sales is returning to its former popularity. The **elasticity of the open account system** and the appeal to self-interest in taking cash discounts for early payment of bills, seem to be generally more acceptable to merchants than the advantages of the trade acceptance. Taking all the factors into consideration it appears that the open account system of carrying on business will remain the most popular for some time to come.

Bank Acceptances

DEFINITION.—The term "bank acceptance" (Fig. 2) has been **defined by the Federal Reserve Board** as "a draft or bill of exchange, whether payable in

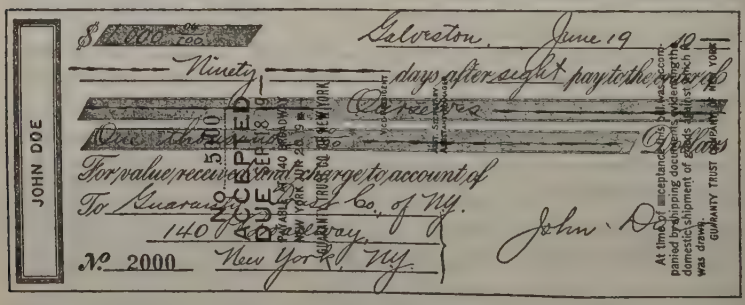
JOHN DOE
Galveston, June 19 10
Ninety days after sight pay to the order of
Dollars
For value received and charge to account of
To Guaranty Trust Co. of N.Y.
140 Broadway
No. 2000 New York, N.Y.
John Doe
ACCEPTED
GUARANTY TRUST CO. NEW YORK
At the time of acceptance this bill was accompanied by shipping documents evidencing a domestic shipment of goods against which it was drawn.
GUARANTY TRUST COMPANY OF NEW YORK

FIG. 2. Bank Acceptance

the United States or abroad, and whether payable in dollars or some other money, of which the acceptor is a bank or trust company, or a firm, person, company or corporation, engaged generally in the business of granting banker's acceptance credit." It is simply a bill of exchange or draft, payable by the bank at a specified future date. The bank, on which the bill is drawn, has acknowledged in writing on the face of the bill that it will pay the amount at maturity.

USE ILLUSTRATED.—Bankers' acceptances are **used primarily in foreign trade.** Thus, in the use of the acceptance shown in Fig. 2, John Doe may have been shipping cotton to a foreign country. He instructs the foreign importer to make an arrangement through his own bank with the Guaranty Trust Co.

f New York whereby he (John Doe) may draw an acceptance on that institution. The Guaranty Trust Co. really substitutes its own credit for that of the foreign importer. This it is willing to do because the **foreign bank sponsors the transaction,** and also because it receives a **commission** of from ⅛ to ½ of 1% for its services. Having accepted the bill, the Guaranty Trust Co. becomes primarily liable, and must stand ready to give John Doe (or the holder in case he has sold it), $1000, 90 days after acceptance, as this is a 90-day sight bill. The Guaranty Trust Co. looks to the foreign bank to place it in possession of sufficient funds before the maturity of the bill, and the foreign bank looks to the importer for these funds. Thus, the New York bank, the drawee, really pays out none of its own money but simply **lends its good name.** The American exporter, the drawer, may after acceptance sell the bill to some other bank, as to the Federal Reserve bank.

The advantages resulting from the use of bankers' acceptances in foreign trade are that the exporter draws against a bank of recognized credit standing, that he may after acceptance discount the bill and thus receive his funds. And through their use the importer receives the goods he desires which John Doe might not have shipped had he been forced to draw directly on the importer. The importer disposes of the goods and turns over enough of the proceeds to his own bank so that it may remit $1,000 to the New York accepting bank to meet the maturing bill. This particular bill was drawn in dollars as are an increasing number by reason of the violent fluctuations in foreign currencies which have taken place since the war and also by reason of the ease with which dollar acceptances are disposed of in the New York money market.

USE IN DOMESTIC TRANSACTIONS.—Not all bank acceptances originate from foreign trade transactions. Some are drawn against **warehoused commodities** and some against the **domestic shipment of goods.** Their use in the domestic trade of the United States is bound to be limited due to the relative ease of getting accurate credit information regarding buyers and to the fact that other methods of financing trade such as the open-book account are in common use.

The bank acceptance should not be confused with the **trade acceptance.** The trade acceptance is the result of a transaction between a purchaser and a seller by which the purchaser acknowledges his obligation to pay for goods which have already been sold to him. A bank acceptance, however, results from a credit granted by a bank or acceptance company, for the purpose of financing an operation in the exporting, importing or producing of goods. In a trade acceptance the buyer accepts the draft, whereas in a bank acceptance the bank accepts it.

MONEY LOAN AND ACCEPTANCE CREDIT.—The American Acceptance Council draws the following distinction between a money loan and a banker's acceptance credit:

Money borrowed is available only to the extent of a bank's loanable funds, but acceptance credits may be extended even where the bank has no funds to loan. The open market will provide the funds drawn from other banks and other sections, and from other countries where money is seeking an opportunity for investment.

Money borrowed is **frequently immobilized—**

1. By investment in plant or other capital investment;
2. By employment in carrying non-liquid assets, such as unsold and unmarketable goods, and manufactures made up in anticipation of seasonal demand, old or overdue accounts; and

3. By employment to replace proprietors' working capital sunk in ill-conceived business, but for which hope for recovery persists.

Money borrowed, either with or without security, is often considered and used as invested capital, the withdrawal of which would more or less seriously embarrass the borrower. **A bank's loans** to customers, except for seasonal requirements or specific purposes, are, therefore, **as a class not always highly liquid.**

A **banker's acceptance credit** taken under provisions of the Federal Reserve Act must be of self-liquidating character; if a secured credit, it may in case of default be liquidated from realization of collateral enjoying a wide market, or, if unsecured, from completion of underlying transactions which, barring failure or fraud, will automatically yield in the banker's hands the funds for retirement. Such a credit, based on current commercial transactions, within limitations designed to minimize credit risks, may, therefore, be granted more freely, and with greater expectation of retirement at maturity than money might be loaned in ordinary course.

In loaning credit the bank must always consider the underlying transaction. Cautious regard for the acceptor's own reputation will require this. His obligation to accept for none but well-considered transactions of proper character is an obligation towards the whole money market, which scrutinizes with expert eye his acceptances sold in the market as evidences of his conduct of business. It is not necessarily so with regard to loans of money—there the lender need satisfy none but himself, unless he seek rediscount. Within legal limits and free from the scrutiny of the discount market he may lend on general belief and without specific knowledge of the purpose for which his assistance is sought.

This may be seen by a comparison of **the relative requirements for eligibility at a Federal Reserve bank** of commercial paper, including promissory notes given for borrowed money, and of bankers' acceptances. As to the note, the use of its proceeds is the determining factor. That use must be commercial, i.e., in one or more of the steps in the process of producing, carrying or distributing goods. The evidence of such use, however, may be, and in practice is, the **financial statement of the borrower,** which must disclose a reasonable excess of quick assets over current liabilities. Such a condition, however, indicates no more than that, at the time the trial balance for the statement was taken, the amount of money borrowed, other than mortgage money or other long time obligations, was not invested in plant, equipment, or other capital investment. It may be assumed that the statement was prepared at not the most unfavorable period as it is given for the purpose of securing credit. Under existing conditions such a statement is perhaps the most definite and precise information available to the lender of unsecured money, although, of course, good reputation and confidence based on personal acquaintance and knowledge of the character, habits and methods of the borrower form other and most important bases for extension of accommodation.

But how different and how much more definite must be the banker's knowledge of the nature and details of the business which he assists by extending his acceptance credit. There are the **documents,** which in many cases he receives, covering actual goods in transit bought or sold; in other cases the **contracts to export** must be disclosed, and the banker must be satisfied with regard to the value of the goods and the ability of the buyer to pay for them, and in some cases security by pledge of goods or staples is necessary. In granting acceptance credit, the banker, if he be prudent and has conscientious regard for the law, must have a more complete knowledge of the business to be financed than he

linarily would have in the case of money borrowed from him, which, once rrowed, may be put to any use at the borrower's pleasure.

It is the essence of commercial banking that money borrowed should be ned on the general faith and confidence of the lender in the borrower, volving, nevertheless, a legitimate and unavoidable credit risk. It must not assumed that there is an entire absence of such credit risk or even a smaller k in granting acceptance credit. Indeed, the hazards in extending acceptance edits are very real.

BANKERS' RISKS IN EXTENDING ACCEPTANCE CREDIT.—The nerican Acceptance Council describes these risks as follows:

Some risks are similar to those in lending money, others are of a different aracter. The accepting banker has to take the hazard of relying on the **rength and good faith of the taker of credit and of the buyer or consignee of e goods.** In the first case he must depend upon the borrower's ability and sire to protect the banker, in case the underlying transaction fails to produce funds necessary to meet the maturing acceptance. The accepting banker this case is in a position very similar to that of a commercial banker relying his customer's willingness and ability to repay borrowed money under verse circumstances. The acceptor's risk should be appraised in the same y, with this distinction, however, that even greater care should be exercised him, first, because of his obligation to the discounters of his acceptance edit, and second, because the amounts involved are apt to be larger.

The risk involved in having to rely upon the strength, ability and good faith the buyer or consignee of the goods sold by the taker of credit, is similar and y be more difficult to appraise, particularly if buyer or consignee is abroad. me may be required to conduct inquiries. If there is doubt, suitable guar- tees may be suggested or required which may result in the buyer providing edit instead of the seller extending it.

It may be wise to decline to finance exports on seller's credit in cases where is not abundantly able to stand a loss, if loss should occur. In this regard, other class of risks must be considered, such as the **nature of the goods and ir value.** Are they perishable or subject to material depreciation in quality transportation? Is their market wide or restricted? Is their market value ble or liable to sudden **decline**? In case of delayed shipment or delivery the other end, will they still hold their value? What facility has the banker disposing of the goods in a foreign port if not accepted by the buyer or signee? What **expenses** would this involve, and what loss might result? penses would include customs duties, transportation, storage, legal fees, nmissions, etc. Loss might include these and also depreciation in quality ough delay, loss on adjustment of insurance, etc., loss in value from a failing rket, loss in exchange and interest.

The accepting banker must have **wide and special knowledge of goods and mmodities,** their values and markets: also of the special dangers and risks ident to their transportation, storage and sale. He must, if financing export de on credit furnished by the seller, have special knowledge of foreign dits, foreign laws and business customs, or employ agents who have this owledge. The American foreign trade banks, in which he possibly has a prietary interest, can serve him in these regards in lieu of, or in addition to, er relations or correspondents, and by their specialized knowledge and ilities can greatly assist those acceptors who have not developed foreign partments or established satisfactory connections abroad.

Many of the same risks in varying degrees surround acceptance credits in **mestic shipments,** but trouble in these may frequently be more quickly

adjusted. In credits secured by warehoused staples, the applicable risks among those mentioned are very apparent, and there is another which should always be guarded against—the danger in lending on commodities held for speculation. Aside from the almost always ominous speculative hazard, bills drawn against speculative holdings are not eligible at Federal Reserve banks. As a precaution in these credits, as indeed in many others, an ample margin of collateral security in the commodity itself should be required, and the banker should inform himself as to the nature and extent of any prior liens on goods and the volume of similar credits taken from others. Credits against unsold goods ordinarily should be restricted to the period of time required to move the goods into channels of distribution through sale.

BANK'S LIABILITY ON ITS ACCEPTANCE.—A bank acceptance credit is very much **like a promissory note of a bank.** According to an opinion of counsel of the Federal Reserve Board the **contractual liability of an accepting bank** is substantially similar to that of a maker of a note. Although the form of a bank acceptance differs from a note, the legal effect is the same. Consequently, the holder of a bank acceptance has the same legal rights against the bank as a holder of a promissory note has against the maker. The bank is, in other words, primarily liable on its acceptance but it holds as security the merchandise covered by the shipping documents and the guarantee of the purchaser of the merchandise.

LIMITATIONS IMPOSED BY LAW.—In order to prevent abuses in the use of bank acceptances the banks are carefully regulated by law as to the amounts for which they may accept. National banks are permitted to accept up to an amount equal to **50% of their capital and surplus and, with the permission of the Federal Reserve Board, up to 100%**; but the aggregate amount of acceptances growing out of domestic transactions cannot exceed 50%. In addition to this, banks are permitted to accept up to 50% for the purpose of furnishing **dollar exchange,** which is separate and distinct from, and not included in, the limits placed upon the acceptances of drafts and bills of exchange above described.

The sixth paragraph of Section 13 of the Federal Reserve Act, as amended limits the amount which any member bank shall **accept for any one person** company, firm, or corporation, whether in a foreign or domestic transaction to an amount not exceeding at any one time, in the aggregate, **10% of its paid up and unimpaired capital stock and surplus.** This limitation does not apply, however, in cases where the accepting bank remains secured either by attached shipping document or by other security growing out of the same transaction as the acceptance.

Other provisions under which banks may accept are as follows:

The bill must—

1. Have its origin in a transaction involving the **importation or exportation of goods,** or
2. Arise from a transaction involving domestic shipment of goods and having **shipping documents attached** at the time of acceptance, securing or conveying title to the goods, or
3. Be secured at the time of acceptance by **warehouse receipts** or such other documents conveying or securing title to readily marketable staples.

ADVANTAGES OF BANK ACCEPTANCES.—**To merchants** the advantages are as follows:

Through bank acceptances the buying field and credit of merchants are in-

eased, enabling them to make purchases advantageously, even in markets here they are unknown. In commercial transactions bank acceptances are ooked upon as commercial paper of the highest character because the primary sponsibility on such paper rests with the accepting bank. This eliminates ne trouble of investigating the credit of the drawers and indorsers.

American exporters have formerly had difficulty in competing with merhants abroad in according foreign buyers acceptable terms of credit. By the se of bank acceptances the credit required for payment of the goods may be stablished by drawing at 60 and 90 days' sight on a New York accepting bank, he acceptance being discounted at the current or at a fixed rate. The exporter hus can be reimbursed at once for the merchandise he sold and can immeiately reinvest his capital in new business instead of having it tied up in credits.

By means of bank acceptances a **bank having surplus funds** may invest them first-class acceptances until the funds are required for other purposes. The ank can either hold such acceptances to maturity or sell them in the open arket, if necessary. The bank's facilities for financing conveniently the transctions of their customers are increased by the use of bank acceptances.

On account of their ready marketability and high security, bank acceptances f well-known banking institutions are sought for more and more as convenient nd profitable **short-term investments** for businesses, institutions, and inestors. One of the features of the whole acceptance movement has been the eadily broadening market for bankers' acceptances. Every principal city has s acceptance dealer or dealers and many of the largest banks have established cceptance departments where complete service in the creating and the buying nd selling of acceptances may be secured. There has been a steady increase the demand for bankers' acceptances for investment purposes, among country anks, savings institutions, corporations, fiduciary institutions, insurance comanies, trustees and individuals in possession of funds. As acceptances have een more widely distributed in these channels the load has been taken from the 'ederal Reserve banks, which were of necessity in previous years, the reservoirs nto which were turned the bills for which there was a narrow market elsewhere.

RELATION OF FEDERAL RESERVE BANKS TO ACCEPTANCE MARKET.—One of the reasons prompting the establishment of the Federal Reserve anks was that they might aid in the creation of a discount market in New York nd in the other financial centers of the country. A discount market is the ame given to that section of the money market which deals in bankers' acceptnces. The market is not centered in one room as is the New York Stock xchange but rather is a term used to embrace all transactions in bankers' ills between banks, financial houses, exporters and importers. The reserve anks have been the **mainstay of the market** as they stand ready at any time absorb those acceptances which cannot find a ready market elsewhere. In ct, at times their purchases have been so large that they really were the arket and the controlling influence on the rates prevailing on bankers' bills. 1924 the twelve reserve banks purchased $2,200,000,000 of acceptances of hich $1,600,000,000 arose from foreign trade. It is estimated that their tal purchases equaled 50% of the total volume of outstanding acceptances. These purchases of acceptances in the open market by the Federal Reserve anks have the same effect on the general credit situation of the country as discounting by member banks. They result in **swelling member banks' serve deposits** with the reserve banks, thus augmenting the member banks' nding power, and they are, therefore, to be watched as closely as the amount rediscounting. The purchases in any volume are frequently made when the edit position is easy and rediscounting by member banks is light, since such

purchases are then the only channel open to the reserve banks for keeping their funds employed in sufficient volume to meet current expenses and earn sufficient profit on the member banks' investment in the capital stock of the reserve banks. This is one of the weak features in the actual operation of the Federal Reserve System, since at the very time when money is a drag in the market, the Federal Reserve banks are compelled to accentuate the condition by forcing more funds into the market, which furnish member banks with a basis for further lending.

Commercial Paper Houses

MEANING OF COMMERCIAL PAPER.—The sale of commercial paper through commercial paper houses, or in the **open market,** is resorted to by large concerns with a high credit rating in securing short-terms loans. Popularly, **"commercial paper"** includes all types of short-term negotiable instruments which call for the payment of money and which may be used for borrowing purposes. This includes promissory notes, drafts, bills of exchange, acceptances, etc. Financially, "commercial paper" generally means only those unsecured promissory notes which are issued by business borrowers and sold through commercial paper houses to banks and large investors.

FUNCTIONS OF COMMERCIAL PAPER HOUSES.—Commercial paper houses act as **middlemen** between borrowers and lenders. The operation of paper houses differs from that of the older note brokers, who merely brought borrowers and lenders together and assumed none of the risks of the transaction. Paper houses frequently **buy up an entire issue of borrowers' notes,** paying their face value, less the market rate of discount and also their commission, which is generally a flat rate of ¼%, irrespective of the maturity of the paper. Any portion of the issue which they fail to sell must be carried until maturity. They profit or lose by any fluctuations in the discount rate.

OBTAINING FUNDS THROUGH COMMERCIAL PAPER HOUSES.—Borrowers wishing to issue notes through paper houses should be prepared to furnish the information required by these houses in their investigations of the borrowers' financial standing and should make their notes in the denominations and forms required by the brokers. Commercial paper houses generally expect borrowers to fill out and sign forms conveying the following information:

1. Nature of business.
2. We have no outside contingent liabilities such as endorsement or guarantees, except .....
3. We have no mortgage debts, nor is there any lien on current assets.
4. Our maximum liability during the 12 months preceding our last audit was $ .....
5. No money used from the sale of our commercial paper is used for any of the following purposes:
   (a) For permanent or fixed investments of any kind, except such as are properly to be regarded as costs of operation.
   (b) For investments of a merely speculative character, whether made in goods or otherwise.
   (c) For carrying stocks, bonds, or other investment securities.
6. None of our personal assets is hypothecated, nor have we any contingent liability arising from rediscount of bills receivable or from accommodation endorsements.

INVESTIGATION MADE BY COMMERCIAL PAPER HOUSES.—Since e commercial paper houses do not always stand in the close relationship ith borrowers that banks do, they usually make a very thorough investigation clients' financial condition. They demand that **balance sheets and profit nd loss statements be certified by public accountants.** They examine the cords of the past earnings of companies over periods of several years to see iat they have made adequate earnings for several years on their invested apital.

In financial statements commercial paper brokers look for indications of quidity of the current assets as an assurance of the payment of the notes at aturity. They also satisfy themselves that the transactions, which are to e financed by the loans, arise from purely business operations the proceeds of hich will provide the funds for repayment at maturity. The self-liquidating iaracter of the paper is thus assured. A **borrower's credit standing** is thoroughly xamined, especially if his name is not a familiar one on the market. The ommercial paper houses make investigations at the usual sources such as redit-reporting agencies, banks with which the borrower does business, other anks which might be less disposed to conceal confidential information, and oncerns from which the borrower has received credit. In this way the com- ercial paper houses are informed of the client's general credit capacity, as ell as his integrity, character and managerial reputation.

INFORMATION FURNISHED BY CREDIT REPORTING AGENCY.—he well known credit reporting agencies, such as Bradstreet's and R. G. Dun Co., are generally the media through which the commercial paper houses btain part of the necessary credit information. The reports of these agencies over the following:

1. Name of company
2. Nature of business
3. Location
4. Branches and locations
5. Officers
6. Financial statement
7. Trade opinions
8. Antecedent history
9. Fire record
10. General remarks (state of business, standing of officers, etc.)

For accuracy the information secured by credit agencies cannot compare ith the reports furnished by public accountants. But there are items of terest such as those relating to fires, public reputation, etc., which are more lly covered by the reports of the mercantile agencies.

DENOMINATION AND FORM OF NOTES.—Commercial paper to be ld to brokers is usually issued in denominations ranging from $5,000 to 0,000. In order **to accommodate the smaller banks** some notes may be sued for as little as $2,500. Each note is signed by the borrower, made payable himself or order, and endorsed in blank. A definite payee cannot be named ecause the buyer of a note is generally unknown to the maker. Notes may be dorsed to give them added strength, but such notes are not popular, as this ocedure is an indication of weakness in the borrower.

Figs. 3 and 4 are typical forms of notes usually required of an individual or rtnership. Fig. 5 (a and b) is a typical form of note for a corporation.

ENDORSEMENT OF COMMERCIAL PAPER HOUSES.—Commercial per houses **do not ordinarily endorse or guarantee** the paper that they sell. xceptions are sometimes made in the case of the larger and more influential nks which will not buy unendorsed paper. As a protection for their own putations, paper houses sometimes assume losses in the event of borrowers' fault, even though such paper has not been endorsed by the paper houses.

MATURITY OF PAPER.—The time of notes may vary from **1 month to 1 year.** The **most common length** of time is about 4 months. Borrowers will generally try to avoid short-term loans and frequent borrowings, for they must pay the ¼% commission to the paper houses on each separate issue. The most important factors influencing the length of loans, however, are the

$\$$_____ _____ *192*__

_____ *after date* _____ *promise to pay to*

the order of _____

_____ *Dollars*

100

at _____

Value received.

No. _____ *Due* _____ _____

FIG. 3. Form of Note Used in Open-Market Borrowing by Individual

$\$$_____ _____ *192*__

On _____ *day of* _____ *192*__ *We promise to*

pay to the order of Ourselves _____

_____ *Dollars*

Payable at _____

Value received.

No. _____ *Due* _____ _____

FIG. 4. Form of Note Used in Open-Market Borrowing by Partnership

COUNTERSIGNED

Secretary

$2,500 PHILADELPHIA, PA., _____

_____ after date for value received,

A. B. C. COMPANY

promises to pay to the order of itself

Two thousand, five hundred Dollars

at the Bank of America, New York City.

A. B. C. COMPANY

_____ President

No. *A2* _____ Treasurer

FIG. 5a. Face Side of Note Used by Corporation

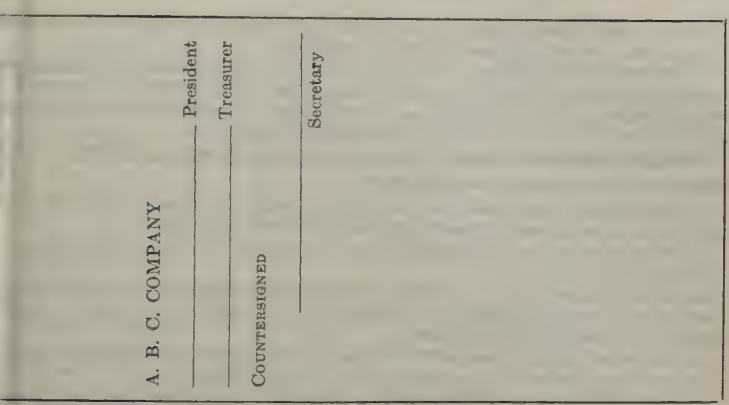

FIG. 5b. Reverse Side of Note Used by Corporation

rowers' immediate needs and the financial condition of the banks and estors who purchase the notes from paper houses.

NOTES BOUGHT ON CONSIGNMENT OR ON MARGIN.—Paper houses not in all cases buy the maximum requirements of the borrowers and thus id assuming the risks of changes in the discount rate. They may some- es **buy on consignment or on margin.** Under the former arrangement the per houses sell only a portion of the notes at a time, waiting until the borrow- authorize them to sell. When they buy on margin, they pay to the borrowers y a part of the face value of the notes received, holding the balance until ds are actually received from the sales.

DISTRIBUTION OF NOTES.—The notes are distributed throughout the ntry by means of **branch offices, correspondents and salesmen** of the mmercial paper houses. Careful watch is kept upon banks and other large esting concerns which may have money to invest temporarily. They are ormed by the salesmen of the nature of the notes which the paper houses offering for sale as well as the more important facts concerning the borrowers' ancial conditions, especially their balance sheet details.

An investing bank does not buy paper without making some investigation ts own regarding the borrower. An option of 10 days usually is granted by per houses in selling notes. A bank which has found the borrower's credit atisfactory may return the paper within that time and receive back the chase price with interest. The bank makes inquiries in the usual way, ding out requests for information to other banks, and employing agencies ch specialize in investigating bank loans. Only the largest and strongest cerns can dispose of their paper on the open market. This accounts for the that though the amount of paper sold annually is large, the number of cerns borrowing in this manner is comparatively small.

TYPE AND SIZE OF LOANS.—The open market is essentially a means of **uring working capital** and cannot be used with safety in raising funds for d capital purposes. There is no close relationship between borrowers and banks which buy their paper. The banks are not obligated to renew notes naturity as the borrowers' own banks might be in the case of ordinary loans.

Therefore, the open market should never be used as a steady source of funds, but only as a means of financing peak operations.

A business which wishes to sell its paper on the open market should have a capital of at least $200,000 and working capital large enough to warrant an issue of paper of at least $25,000. A smaller issue would hardly pay the commercial paper house for the costs of investigation and sale.

OTHER REASONS FOR UTILIZING THE OPEN MARKET.—These reasons may be summarized as follows:

1. Local banks are sometimes not large enough to take care of the needs of all of their customers, especially those of considerable size.
2. Interest rates on commercial paper may be more favorable than on ordinary bank loans.
3. Many concerns look upon open-market borrowing as a way of advertising themselves, bringing their names before a very wide market and so opening new fields of business and credit.
4. The open market often affords a means of borrowing to settle bank loans, thus enabling borrowers to maintain credit at their banks.
5. None of the proceeds of sales of commercial paper need be tied up as in the case of bank loans, of which a certain percentage must be kept on deposit.

ADVANTAGES OF COMMERCIAL PAPER TO BANKERS AND INVESTORS.—Bankers, investors and commercial concerns having surplus funds available for temporary investment may find that they can obtain a higher rate of interest on such investments than they can obtain from balances on deposit with banks. In addition to affording a means of investing idle funds, commercial paper is flexible in that funds can be kept safe and liquid. The reasons for this are as follows:

1. **Maturities** can be arranged to suit the needs or convenience of the investor.
2. The **risk** can be **diversified** as to geographical location as well as to types of businesses.
3. The investors or bankers are under **no obligation to renew the loans.**
4. Commercial paper **can be rediscounted** through the Federal Reserve banks to provide liquid assets in times of monetary stringency.

DISADVANTAGES OF OPEN-MARKET BORROWING.—There are certain dangers in open-market borrowing, some of which may be avoided. One of the greatest dangers is that borrowers may **neglect to maintain their bank credit lines.** Few concerns are strong enough to rely solely upon the open market to the complete exclusion of banks. Since commercial paper houses are usually "fair weather friends," it is difficult to obtain sufficient funds from them in times of financial stringency. At such times proper banking connections are particularly valuable. Loss of contact with banks deprives borrowers of the advice and intimate counsel which such institutions can impart. Banks can be of great service to their clients by imparting information on economic and financial conditions.

LIMITATIONS OF OPEN-MARKET BORROWING.—With all the advantages of open-market borrowing there are certain limitations to be considered by financial executives. These limitations may be summarized as follows:

1. Open-market borrowings are **not available for new businesses** or those whose credit position is not established.
2. **Small businesses** or those which cannot justify commercial paper issues

25,000 or over, are usually precluded from open-market borrowing, as the of their loans does not justify the commercial note brokers in incurring expenses of investigations.

. Open-market borrowings are **not adaptable to certain types of business,** ticularly those with a slow turnover of merchandise, and those which deal uxuries or articles sold on the instalment plan.

. The **cost of open-market borrowing** may, under certain conditions, be ıter than that of borrowing from local banks, especially if the notes are rt time paper on which the flat rate of ¼% commission must be paid on h issue. As a rule, however, the shorter the time, the lower the interest . This may in part offset the additional commission.

. Banks purchasing commercial paper, as a rule, have **no personal contact** h **the borrower** and generally demand payment at maturity regardless of ther or not the business of the borrower is inconvenienced.

. **In times of business stringency** the borrower would be compelled to pay ıer rates than those which could be obtained from a bank with which he had personal relations for a number of years.

. **In periods of business reactions,** such as prevailed in 1920 and 1921, e lines of credit with banks are more desirable than apparently available n-market credit.

WHEN TO USE OPEN-MARKET BORROWING.—Open-market borrow- are at times an economical means of raising money for temporary purposes. ıe of these purposes may be:

. To **settle lines of credit** with the local banks. After the re-establishment he lines of credit the commercial paper may be retired through bank loans.

. To **meet seasonal variations** in some businesses which require additional porary capital to finance sales or production for several months of the year. commercial paper may be retired when the peak of the financial needs assed.

OME PROMINENT COMMERCIAL PAPER HOUSES.—There are a ıber of commercial paper houses in the United States, some of which are follows:

Bayne, Hine & Co.	W. O. Gay & Co.
A. G. Becker & Co.	Goldman, Sachs & Co.
Blake Brothers & Co.	Hathaway, Smith, Folds & Co.
Bond and Goodwin, Inc.	Lane, Piper & Jaffray
G. H. Burr & Co.	Merrill, Lynch & Co.
Curtis & Sanger	E. Naumburg & Co.

DISCOUNT COMPANIES.—Another means of obtaining funds in the open ket is through discount houses. These institutions are engaged largely in purchase and sale of trade and bankers' acceptances, although they also in other commercial paper. The discount companies are a comparatively nt development in America.

he *Wall Street Journal* describes the functions of the Discount Corporation ew York, one of the largest discount companies in America, as follows:

Discount Corporation of New York discounts approved bankers' accept- es and trade acceptances with bank endorsements. It buys and sells t-term government obligations. It receives funds repayable on demand t fixed maturity against the security of bankers' acceptances or government gations. It acts as sort of 'back log' in the bill market, tending to absorb ver-supply, or to feed out bills to the market when it displays a readiness ake them. In this way it exercises a very stabilizing effect upon the market,

and performs a service similar to that of the great discount houses of London.

"Although there are several banking institutions and firms, both here and elsewhere, which undertake to deal in substantially the same class of paper as the Discount Corporation, a requisite to a successful discount bank is the availability of a world money center, where are represented many foreign banks and agents to afford a good supply of bankers' bills.

"At present, New York City might be said to be trying to establish itself as such a world money center, with considerable success it is true, but not such as to encourage the establishment of other like concerns here."

Some of the larger discount companies which deal principally in acceptances and maintain offices, or have agents, in the principal large cities of the United States, are the following:

Discount Corporation of New York
First National Corporation
Salomon Brothers & Hutzler
Scholle Brothers
Shawmut Company

Finance Companies

CLASSIFICATION AS TO FUNCTIONS.—The Division of Analysis and Research of the Federal Reserve Board classifies finance companies thus:

1. Buying or discounting commercial receivables which include accounts, notes and acceptances.
2. Advancing funds to dealers to finance the purchase of automobiles from manufacturers or wholesalers.
3. Advancing funds to enable retail dealers to finance the sale of automobiles on the instalment plan.
4. Advancing funds to retail dealers to finance instalment sales of agricultural implements, books, electrical appliances, furniture, musical instruments, etc.
5. Advancing funds against merchandise.

CASH RECEIVED FROM SALE OF ACCOUNTS RECEIVABLE.—Finance companies, in purchasing accounts receivable, usually advance from **70 to 80% of the face** amount of the accounts, but in some instances they advance from 65 to 85%, depending on the nature of the accounts, the character of the business and the policy of the finance company. The balance of 15 to 35% as the case may be, is required by the finance companies as a margin of safety to protect them against loss until the accounts are collected. After the principal, interest and other charges are repaid, any balances or uncollected accounts are returned to the sellers.

A large concern organized for the purpose of financing manufacturers, wholesalers and jobbers, on the **non-notification plan** through the medium of their open accounts and notes receivable, outlines its plan as follows:

1. An agreement is signed for the use of the service.
2. The correctness of the accounts receivable, on which realization is desired, is supported by copies of the invoices with the original bills of lading, shipping receipts or delivery tickets.
3. Payment of about 80% of the net face of the accounts is made. The balance is paid to the assignor immediately upon receipt by the finance company of the customer's original check.
4. The assignor collects all accounts sold, endorses the customers' checks with a rubber stamp reading: "Pay to the order of any Bank or Banker," and sends them to the finance company.

FINANCE COMPANY'S DEMANDS IN ITS CONTRACT.—The various nance companies make different demands on their customers in the contracts rawn up with them to take over their accounts. Most of them, however, nbody the following:

1. The finance company must be allowed to make a careful **investigation of he credit standing of the borrower,** using the same methods as are employed y banks and commercial paper houses.

2. The assignor must supply a **signed financial statement,** giving a detailed nalysis of the assets and liabilities of the business. He must affirm that this tatement is correct and that he will notify the credit company of any material hange in the condition of the business, under penalty of his obligation to the redit company immediately becoming due and chargeable against any reserves r balances held by the credit company.

3. The assignor must pay the **costs of a fidelity bond** to cover losses arising rom assignment of false accounts or from the failure of the assignor to remit ayments on such accounts.

4. The assignor must further **guarantee:**

(a) That the debtors are solvent and that if the debtors become insolvent the assignor will pay the accounts.
(b) That all payments to the credit company will be made in full in cash.
(c) That the accounts are due for bona fide sales and deliveries, not for shipments on consignment.
(d) That there are no counterclaims on any account.
(e) That no account sold has already been sold to some other finance company.
(f) That all payments on accounts will be sent to the finance company the day they are received.
(g) That no accounts will be sold elsewhere without 10 days' notice to the finance company.

5. That the assignor will allow the auditors of the finance company to inspect is accounts and records at any time.

6. That the salaries and traveling expenses of the finance company's auditors ill be paid by the assignor.

7. That the assignor will give the finance company power of attorney to ransact any business relating to the assigned accounts.

A typical **finance company contract** is as follows:

THE.....CORPORATION

CONTRACT

This Agreement entered into between ..... designated as: rst party, and THE ..... CORPORATION, a ..... corporation, its successors or assigns, designated as second party.

Witnesseth, That Whereas first party is desirous of selling to second party, Accounts eceivable, Notes, Leases, Mortgages, Contracts and Choses in Action, hereinafter designated as "Accounts," evidencing sales and deliveries of personal property usually dealt by first party. Now Therefore, in consideration of the premises, the statements made the second party regarding the financial condition of the first party, and the mutual venants hereinafter mentioned, the parties hereby agree as follows:

FIRST. Second party will from time to time, during the continuance of this agreement d within the limits agreed upon, buy such Accounts, belonging to first party as may be ceptable to second party, and will pay therefor.

One hundred per cent (100%) of the net face value thereof, less a charge equal to the

legal rate of interest on the money outstanding thereon, on which –77– per cent of the net face value thereof shall be paid in cash upon acceptance thereof by second party, and the remaining –23– per cent less any deductions and plus any overpayments by the debtors and less total charges, as shown in lines 51 to 60 hereof [numbering of lines omitted here], to be paid to the first party immediately upon payment of any such Accounts to second party; provided, that no payments of any such remainder need be made so long as any Accounts purchased hereunder are affected by any breach or violation of warranty hereunder, but such remainder and any moneys, Accounts or property of first party which may come into possession of second party may be held and applied to the payment of any such Accounts.

SECOND. In order to obtain from second party the right and privilege which are hereby given, to make collection at its office and expense of all Accounts sold to second party and thereby avoid objections by, and any possible loss of trade from any of its customers, through second party collecting the Accounts direct from the Debtors, first party will pay second party for the salaries and all expenses of travel of auditors of second party, who shall have the right to call every thirty days or oftener and inspect, audit, check and make extracts from the books, Accounts, records, orders, original correspondence and other papers of first party relating to Accounts sold hereunder as provided in any fidelity bond which may be obtained by second party; said right and privilege may be terminated by second party at any time, and shall terminate immediately upon the suspension of business, request for general extension, bankruptcy petition, or any act amounting to a business failure, by or against first party. First party warrants that it will transmit or deliver to second party at its office in ..... on the day of receipt thereof, all original checks, drafts, notes and other evidences of payment received, in payment of, or on account of, any Accounts purchased hereunder.

THIRD. Second party will: (a) place its collection department at the disposal of first party, and upon request endeavor to collect direct from the debtors any Accounts purchased hereunder. (b) Have its auditor give first party his report of each examination as above, with full instructions as to the best method of keeping the books, records and Accounts of first party. (c) Place its credit department at the disposal of first party and pay for all accounting, postage and credit investigation of Accounts purchased or offered for purchase hereunder and upon request give credit and financial advice. (d) Have its employees at the request of first party instruct first party how to increase sales, organize the business of first party in an efficient manner, and increase the profits of first party. (e) Permit first party to submit any of its sales contracts with its customers to the General Counsel of second party for advice and opinion as to the form and legality thereof. (f) Accept at par subject to payment all remittances received through first party, and pay the cost of all exchanges on same. (g) Obtain and have on hand at all times sufficient funds to make prompt remittance to first party for all acceptable Accounts within the limits agreed upon. (h) Supply all forms proper for assignment of Accounts hereunder and assist in the prompt collection thereof.

FOURTH. The total compensation to be paid by first party for all services and other considerations specified in lines 12 to 16 hereof, added to the charge as mentioned in lines 12 and 13 hereof, it is hereby agreed shall be:

FIFTH. In consideration of the prompt purchase and remittance by second party for Accounts acceptable to second party, without waiting to make a complete credit investigation thereof, first party hereby warrants that: (a) First party and each debtor named in an Account is solvent and will remain so until maturity thereof; (b) There will be no suspension of business, request for general extension, bankruptcy petition, nor any act amounting to a business failure by or against first party or any debtor; (c) Every Account purchased hereunder and any settlement received thereon will be paid in full at maturity in cash or ..... par funds; (d) Prompt payment will be made to second party of the net invoice value of any goods returned, rejected, re-sold, re-routed in transit, or of any allowance or credit upon any Account sold to second party; (e) Each Account offered for sale to second party, shall represent a bona fide sale and delivery of property usually dealt in by first party, and shall be for a certain undisputed, liquidated claim or demand, which is due or to become due on the dates set forth; (f) First party will not sell or assign any of its own Accounts elsewhere without first giving ten days' written notice to second party of such intention.

SIXTH. Contemporaneously with the purchase of Accounts hereunder, first party will, proper instrument in writing, assign and set over to second party such Accounts pur- ased by it as aforesaid, to the end that second party may be and become subrogated all of the rights, securities or guaranties possessed by the first party in respect thereto, luding the right of stoppage in transit; should the latter right be exercised, or should the btor named in any account fail or refuse to accept, receive or retain, or return the prop- y evidenced by such Account, or should said property be re-routed or re-consigned, then e title to said property or property exchanged therefor, with the right to sell or otherwise spose thereof, and the title to any new Account created through the re-sale thereof, all be and remain in said second party. Immediately upon consummation of the pur- ase of Accounts hereunder, the first party will make upon its books suitable and proper tries disclosing the absolute sale of said Accounts to second party. First party further ll execute and deliver to second party any instrument necessary, proper or convenient carry into effect the terms, provisions and conditions of this agreement, or to facilitate e collection of Accounts purchased hereunder.

SEVENTH. If any warranty, expressed or implied, made herein or resulting from the ovisions hereof with respect to any Account or made in or resulting from the provisions the assignment of any Account to second party or from the subject matter hereof, shall broken or violated, either through the act of first party or others, the damages which cond party shall be entitled to recover from first party, as a result thereof, shall include attorney's fees, Court costs and all other expenses which may be expended or incurred second party to obtain or to enforce payment of Account purchased hereunder, either against the debtor, first party, or any of its guarantors, or in the prosecution or defense any action or concerning any matter growing out of or connected with the subject matter this contract, and Accounts purchased thereunder. Granting extensions to, or adjust- ents of claims of debtors named in Accounts purchased hereunder, compromises, compo- ions or settlements of such Accounts, either with the debtor or others, or of the sale, signment or transfer of Accounts thereunder by second party, shall not affect the lia- lity of first party under any of its warranties as herein provided.

EIGHTH. First party does hereby make, constitute and appoint .... or ....., or any person whom either he or second rty may designate, its true and lawful attorney, with power to receive, open and dispose all mail addressed to first party; to endorse the name of first party upon any notes, checks, afts, money orders or other evidence of payment or collateral that may come into the ssession of second party of or upon Accounts purchased by it hereunder; to endorse the me of the first party on any invoice, freight or express bill or bill of lading relating to y said Account; to sign the name of first party to drafts against debtors, to assignments d verifications of Accounts and notices thereof to debtors; and to do all other things cessary or proper to carry out the intent of this agreement.

NINTH. Neither of the parties hereto shall be bound by anything not expressed in iting by and between the parties; this agreement and all of its provisions shall inure and become binding upon the parties, their heirs, executors, administrators, successors d assigns only after acceptance by two duly authorized officers of second party; the ovisions of this agreement shall be construed and interpreted in accordance with the ws and decisions of the State of ..... first party hereby waives all notice any matter to which it might otherwise be entitled, also waives presentment, demand y protest of any note, draft or other evidence of payment; either party hereto shall have e right at any time, upon written notice, to cancel this agreement as to future transactions.

IN WITNESS WHEREOF, first party has caused these presents to be executed this]..... y of ..... 19..

TEST OR TNESS ..... Signed.....(Seal).... President, Partner or Owner

Accepted by THE ..... CORPORATION, this ..... day of ....19..

.....(Seal).... By.....(Seal).. Treasurer or Ass't. Treasurer President

THE FOLLOWING GUARANTY AND WAIVER IS TO BE SIGNED BY INDIVIDUALS:

In consideration of the acceptance by "second party," of the aforementioned agreement between the "first party" and "second party," of other valuable considerations, and of the sum of One Dollar in hand paid to each of the undersigned, the receipt of which is hereby acknowledged, the undersigned and each of them do hereby jointly and severally guarantee to second party, its successors or assigns, the full and prompt payment, performance and discharge by first party of said agreement, and of each and every of the agreements, terms, provisions, and conditions set forth in said agreement, and of any rider or riders to be thereto attached, and of any other instrument or instruments given or executed in pursuance thereof, provided to be done, paid or discharged by the first party, and the due execution thereof. The undersigned and each of them do hereby agree that the liability hereunder shall be direct and not conditional upon the pursuit by the second party, its successors or assigns of whatsoever remedies it or they may have against said first party, and shall continue until second party receives written notice revoking said liability on future accounts or transactions, and they and each of them do hereby waive, release, assign and transfer to second party, so far as the obligation herein is concerned, all rights in and to homesteads and exemptions to which they or any of them may be entitled under the laws of any State or States.

This guaranty and waiver shall be construed and interpreted according to the laws and decisions of the State of ..... The undersigned hereby jointly and severally waive all notice of default by first party, and waive notice of acceptance of the guaranty by second party, and waive all other notices to which they might be otherwise entitled.

In Witness Whereof, we have hereunto set our hands and seals this ..... day of ..... 19..

Witness.....	Signed.....	(Seal)
Witness.....	Signed.....	(Seal)
Witness.....	Signed.....	(Seal)
Witness.....	Signed.....	(Seal)

A typical **remittance sheet** is shown in Fig. 6. Fig. 7 shows a form of **certificate accompanying assigned accounts,** and Fig. 8 a form of **financial statement required by the finance company.**

TYPES OF CONCERNS WHICH SELL ACCOUNTS RECEIVABLE.—Finance companies which confine their operations to the purchase of accounts receivable deal almost exclusively with manufacturers and merchants whose businesses are relatively small. One of the largest finance companies shows **the rating of its clients** as follows:

8%	are rated	$1,000,000	and	over	
2%	"	"	750,000	"	"
2%	"	"	500,000	"	"
10%	"	"	250,000	"	"
27%	"	"	100,000	"	"
26%	"	"	50,000	"	"
25%	"	"	under $50,000		

A. E. Duncan, in an article on "The Assignment of Open Accounts Receivable," *Coast Banker*, May 1922, sets forth that one of the largest credit houses describes firms which sell accounts as follows:

"**Live wire money making concerns,** whose energy, ability and plant capacity are out of proportion to their invested capital, no matter how large they are. The total cost is quickly covered by the added profit on increased sales. Many such concerns regard a credit company as a silent partner with elastic resources, and prefer to divide a small part of their profits with such a company tempo-

Original Checks received from your customers for accounts assigned must be sent to us

REMITTANCE SHEET

FINANCE COMPANY

NEW YORK,_____192

NAME_____

THE FOLLOWING REMITTANCES WERE THIS DAY RECEIVED.

REMITTED BY	No.	DATE OF BILLS	DUE DATE	GROSS AMOUNT OF BILLS	RETURNS AND ALLOWANCE	AMOUNT OF DISCOUNT	AMOUNT OF CHECK	EXCHANGE	DRAWN ON

FIG. 6. A Typical Remittance Sheet

TRIPLICATE CERTIFICATE OF INDEBTEDNESS

THIS IS TO CERTIFY THAT THE PERSONS NAMED BELOW ARE INDEBTED TO THE UNDERSIGNED IN THE SUMS SET OPPOSITE THEIR RESPECTIVE NAMES, FOR GOODS SOLD, SHIPPED AND DELIVERED.

NUMBER.....
CERTIFICATE 100%.....
RESERVE 20%.....
CHARGED 80%.....
COMMISSION %.....
CHEQUE %.....

Date of Invoice		Name of Debtor	Address	Due Date Net Cash		Amount of Invoice	Please Leave Blank					
Mth	Day			Mth	Day		d'te	Payments	Balance	Reserve	Rating Brad.	Rating Dun.

Dated at ....., this ..... day of ..... 192..

In consideration of One Dollar and other valuable considerations, receipt of which is hereby acknowledged, the undersigned hereby sells, assigns and sets over to THE _____ CORPORATION, its successors or assigns, all its right, title and interest in and to the open accounts and contracts above named, represented by invoices and shipping documents delivered herewith aggregating ..... Dollars ($_____) including all moneys due and to become due upon the same and title to the merchandise represented thereby, in case same is not received, returned, rejected or reconsigned, together with the right of stoppage in transit, and title to any new account created through the resale of said merchandise' including any moneys due thereon.

The undersigned represents that the above schedule correctly sets forth undisputed open accounts and contracts now owing the undersigned for bona fide sales and deliveries of merchandise in accordance with specifications of the buyer; that there are no offsets, contra accounts or counter claims of any nature whatsoever against any of them; that the correct maturities of said open accounts and contracts have been set forth; and that proper entries have been made on its books disclosing the absolute sale thereof to THE _____ CORPORATION, its successors or assigns.

The undersigned further represents that all collections received or credits allowed by it upon any and all open accounts and contracts previously sold or assigned to THE _____ CORPORATION have been duly, properly and regularly entered to the credit of the accounts of the respective customers on the books and records usually used for such purpose; that prompt report with amount thereof has been made to THE _____ CORPORATION of the rejection, return, reconsignment or resale of any merchandise represented by any account and contract previously sold or assigned to THE _____ CORPORATION; that all such collections have been promptly forwarded to THE _____ CORPORATION, and that none of said open accounts and contracts have been sold or assigned to any other party.

The undersigned hereby acknowledges receipt from THE _____ CORPORATION of the above open accounts and contracts for collection solely as agent for, and under agreement existing with THE _____ CORPORATION. Upon demand by THE _____ CORPORATION, its successors or assigns, the undersigned for valve received agrees to buy at face value thereof any and all of the above open accounts and contracts that may become in Default as described in agreement existing between THE _____ CORPORATION and the undersigned.

The open accounts and contracts hereinabove set forth are hereby purchased and paid for by THE _____ CORPORATION upon the faith of each of the above representations of the undersigned.

Accepted by THE _____ CORPORATION, at

_____—President Signed.....

By .....—Treasurer By.....

FIG. 7. Form of Certificate Accompanying Assigned Accounts

TO THE.....CORPORATION

Dear Sirs:—For the purpose of inducing The ..... Corporation to enter into a contract to purchase Accounts Receivable, Notes, Contracts, and Choses in Action hereinafter designated as "Accounts." And Thereafter, and from time to time, to purchase Accounts, the undersigned hereby makes and delivers to The ..... Corporation the following statement of its assets and liabilities, which statement shall be considered as continuing and authorizing The ..... Corporation to act upon it and use it as the basis for making such contract to purchase Accounts and thereafter, and from time to time, as the basis for the purchase of said Accounts as and when said statement shall continue as being substantially correct and to be used and acted upon as aforesaid until the undersigned shall notify The ..... Corporation of any material change in the financial condition of the undersigned.

In consideration of the making of the aforementioned contract and of the purchase of said Accounts, the undersigned agrees that if the undersigned at any time should fail, become insolvent or commit an act of bankruptcy, or if any of the representations made below are untrue, or if the undersigned fail to notify The ..... Corporation of any material change as before agreed; then and in any such case, all obligations of the undersigned held by or for The ..... Corporation shall immediately become due and payable without demand or notice and the same may be charged against any balance the undersigned may have with The .....Corporation, the undersigned hereby giving The ..... Corporation a continuing lien upon such balance of account from time to time existing to secure all obligations of the undersigned held by or for The..... Corporation.

ASSETS		LIABILITIES	
CASH on hand.....		ACCOUNTS PAYABLE (Unsecured)	
CASH in Banks		For merchandise.....	
Name of Bank.....		All other.....	
Name of Bank.....		ACCOUNTS PAYABLE (Secured)	
Name of Bank.....		For merchandise.....	
ACCOUNTS RECEIVABLE		All other.....	
Due from business customers, good.....		NOTES PAYABLE OR ACCEPTANCES (Unsecured)	
Due from partners or other than customers.....		Banks (Give names).....	
NOTES RECEIVABLE:		For merchandise.....	
Due from business customers, good.....		All other.....	
Due from partners or other than customers.....		NOTES PAYABLE OR ACCEPTANCES secured by any part of reported Asset or otherwise, including own banks. (Give details).....	
STOCK INVENTORIES:		BONDED DEBTS (When due)	
Finished product (how valued).....		.....	
In process of manufacture (how valued).....		MORTGAGE DEBTS (full details)	
Raw materials and supplies.....		.....	
PROPERTY AND PLANT:		CHATTEL MORTGAGES.....	
Land and buildings.....		.....	
Machinery and fixtures.....		DEPOSITS OF RESERVES WITH US:	
Teams and automobile trucks.....		By.....	
OTHER ASSETS:		Total liabilities.....	
.....		Net worth.....	
.....		Total.....	
Total Assets.....			

1. Are any of the above assets pledged as collateral?
2. Are any of the above Liabilities secured by collateral?
3. Contingent Liability: Accommodation Indorsements?
4. Customers' Notes Discounted
5. Have you ever sold or assigned any of your Accounts Receivable? If so, to whom and when?
6. Insurance carried: Accounts Receivable? Merchandise $ Plant $ Machinery, etc. $

7. The basis of above statement is from (Actual) (Estimated) Inventory by Mr. date
8. Our regular months for taking Actual Inventory and closing books are
9. What were total expenses last 12 months?
10. What was total gross profit last 12 months?
11. What was net (loss) (profit) last 12 months?
12. Amount of Annual Sales $ Amount of Common Sales $
13. Our net losses by failures have not exceeded % on our gross sales during any one of the last years
14. If you have a Bond issue or Mortgage state specifically:
    (a) What items on your statement are covered by it?
    (b) By whom held?
    (c) When payable?
15. Do you sell mostly to Manufacturers, Jobbers or Retailers?
16. Is trade local or scattered?
17. Is any of your merchandise on Consignment, Approval, or subject to guarantee or test?
18. Have you or any of your Officers or Partners ever failed in business?
19. Have you ever had a fire loss?
20. Are there now any legal proceedings for debt of any unsatisfied judgments standing against you, or any of your Officers or Partners? Answer fully

Questions for a Corporation:
Capital: Authorized $ Subscribed $ Paid in: Cash $ Other
Property $
Incorporated in the year under the Laws or by Special Act of the State of

Officers:
President , worth outside of business $
Vice-President , worth outside of business $
Secretary , worth outside of business $
Treasurer , worth outside of business $

Questions for a Partnership — Names of each General Partner and the respective net worth of each outside of business:
Mr. Net worth $
Mr. Net worth $
Mr. Net worth $

The above statement, both printed and written, has been carefully read by the undersigned, and is a full and correct statement of the financial condition of the undersigned as of 19

Dated and signed under seal at this day of 19

In the presence of

Witness

Sign here (Seal) Corporation or Partnership

Fig. 8. Type of Financial Statement Required by Finance Companies

rarily and continue in control of their businesses rather than to pay a large portion of their profits permanently to new partners or stockholders.

"Many firms are more experienced in the practical manufacturing and selling part of their businesses than in finance, and **dislike to borrow much money from banks,** with which they would have to carry substantial balances.

"Many others, especially manufacturers, have most of their invested capital tied up in real estate, plant, machinery, etc., usually blue-penciled by the banker. Their **current liabilities are out of proportion** to current assets, although they may sell to the very highest rated trade.

"Many firms are located in towns having **limited local banking facilities,** and have not established, or for many reasons may be unable to establish, sufficient bank credit connections in the larger cities.

"Many others **need extra money** to carry them through the peak of their seasons, to buy for spot cash, to discount or to pay their bills promptly, or to increase the volume of their trade with but little increase of overhead. The saving in discounts alone will probably offset the cost.

"Many firms which must sell on from six to twelve months' time, payable in instalments, thereby quickly tying up their operating capital, must find a continuous outlet for such paper."

NOTIFICATION AND NON-NOTIFICATION PLANS.—In connection with the sale of accounts there are two methods of dealing with the customer, notification and non-notification. Under the former the debtor is informed of the assignment of his account to the credit house. Many businesses object to this method on the ground that a customer is inclined to regard the practice as an indication of the seller's financial weakness. The non-notification plan is offered as a remedy. No notice is given the debtor of the assignment of his account. He continues to remit to the seller, who acts in the capacity of agent of the finance company and turns over to it all collections. Under the non-notification plan the finance company must be very careful as to the integrity and character as well as the financial responsibility of the assignor. Frequently the finance company demands a fidelity bond at the expense of the assignor when purchasing accounts under this plan.

COST OF OBTAINING CAPITAL THROUGH SELLING ACCOUNTS RECEIVABLE.—In general, it may be said that the cost of securing capital by selling open accounts to a finance company is **considerably greater** than borrowing from banks or in the open market. But if bank credit is not open to the borrower, the finance company remains as a legitimate means of procuring working capital.

The charges of the finance companies vary as to amount and method of assessment. Generally they charge from 1/30 to 1/25 of 1% a day on the full amount of the account plus $5 per $1,000 on the first $100,000 of accounts purchased during any twelve months' period. Thus, if the company buys accounts amounting to $100,000 on the basis of 75% of their face value, it advances to the seller $75,000, and if these accounts run for 30 days, at a charge of 1/30 of 1% a day, the costs are as follows:

Interest (1/30 of 1% a day = 1% in 30 days on $100,000)	$1,000
Service charge of $5 per $1,000	500
	$1,500

$1,500 ÷ $75,000 = 2% a month or 24% a year.

Another method, which, however, is substantially the same as the above is followed by some finance companies. The seller, in submitting his schedule

of accounts receivable, is charged an initial fee of ½% on the face value of the accounts. This charge is made every time he submits a schedule and is generally called a service charge. The account is also charged 1% a month for the term of the credit. The finance company advances 75% of the amount of the accounts. If the accounts run for a month, the cost is 1½%, or 18% a year, on the amount purchased. As the advance was only on 75% of the face amount of the account and the charges were on 100% the rate of interest is 24% a year. There are several different bases used to compute the charges but the average rate amounts to about 18 to 24% a year.

COST OF ASSIGNED ACCOUNTS COMPARED WITH DISCOUNTS.—Representatives of finance companies point out that the cost of financing by assigning accounts is less than by allowing cash discounts. They compare costs as follows:

Where the terms are 2/10 or 30 days net on an account of $1,000, the discount equals $20.00 for 20 days.

When the account is assigned the costs are:

Service charge	$ 5.00
Interest 1/30 of 1% per day on $1,000	10.00
	$15.00

Assignor receives an advance of 75% of $1,000 or $750 when goods are sold and the balance less costs when paid by the customer.

The comparison of the cost of financing by assigning accounts receivable with the cost of allowing cash discounts is not altogether fair for the following reasons:

1. When the discounts are taken the seller is sure of his money.
2. If discounts are not taken and the accounts are sold, the merchant not only pays for the advance he receives, but he must repay the advance if the debtor fails or for any reason does not pay.

FINANCING INSTALMENT SALES.—Manufacturers or dealers who sell household furniture on the instalment plan generally receive a percentage of the purchase price (usually about 10%) down and an agreement for the payment of the balance in periodic instalments. This agreement, or contract, may be sold to a discount company which generally advances about 80% of the unpaid balance to the dealer, 10% being retained as a commission and 10% as a reserve. The reserve is returned to the dealer when the instalments are all paid. The dealer must guarantee the contracts. The cost of capital secured in this manner is about 20% a year. This would mean that the dealer would be paying a very heavy price for his capital were it not for the fact that he generally adds this charge to the selling price of his article, in which case the interest on the commission and reserve is the only cost of a quick realization of his profits. In some cases the credit companies allow interest on the reserve, but generally they do not.

FINANCING AUTOMOBILE SALES.—The financing of automobile sales is carried on under two plans:

1. **The wholesale plan** calls for payment by the dealer to the manufacturer of a portion, generally about 15%, of the wholesale price of the cars and the acceptance of a time draft drawn on him by the manufacturer for the balance. The credit company will purchase this time draft for about 90% of its face value, the balance less a commission being returned to the manufacturer when the draft is paid. In setting the price of the cars to the dealer, the manufacturer

includes the commission of the discount company. The **security given the discount company** is a lien on the cars, effected by means of a trust receipt from the dealer. The latter must store the car and remit the proceeds of its sale to the discount company which holds the time draft.

2. **The retail plan** is an agreement between the dealer and the discount company. The dealer sells the car to the customer who pays a percentage of the price down and tenders the dealer a series of instalment notes for the balance. The discount company buys these notes from the dealer, paying from 80 to 100% of their face, less its charges. As security, the discount company receives a chattel mortgage, lease, or conditional sale agreement on the cars, the particular legal form depending upon whether or not the law of the state where the sale is made allows the discount company to retain full title to the car. The dealer usually has to endorse the notes and warrant the truth of the customer's statement of his financial condition. The cost of this method of securing capital varies from 15 to 30% a year, according to the value of the car, the use to which it is put, the time the notes are to run and similar conditions. The dealer usually includes this amount in the price of the car.

ADVANTAGES OF USING FINANCE COMPANIES.—The advantages of using the facilities offered by finance companies may be summarized as follows:

1. A concern without adequate credit facilities at its bank or in the open market may obtain **additional working capital** through finance companies.

2. An active and profitable concern which has more business than it can handle on its own capital, and which has no other more economical sources of credit available, must turn to the finance companies for additional working capital. The costs may be high, nevertheless the profits of the increased business may be large enough to warrant the payment of such charges.

3. **Bankers will not finance instalment sales** on account of the risk and the varied details involved. As banks are not equipped to handle such business, instalment dealers are compelled to use finance companies.

4. Bankers generally confine their operations to short term loans. If borrowers must extend **long terms of credits** to their customers the banks sometimes hesitate to extend credit, whereas the finance companies often extend loans to such borrowers.

DISADVANTAGES OF USING FINANCE COMPANIES.—The disadvantages of using finance companies may be summarized as follows:

1. **The cost** is very high. In addition to the interest charges there are service and supplemental charges, among which are the salaries and expenses of the finance companies' auditors during their periodical inspections.

2. Bank and commercial credit may be injured. Banks and creditors often look upon this method of financing by a merchant as a sign of weakness and as a **reflection upon the credit of the business.**

3. Financing through finance companies often has a tendency to tempt the owner of a business to deceive his creditors. Concerns which hypothecate accounts do not as a rule care to have it known that they are compelled to resort to such financing and generally make every effort to conceal the fact from creditors. Receiving advances on accounts as soon as the bills are sent out also has a tendency to make the seller careless as to his credit risk, and he often loses sight of the fact that unpaid or uncollectible accounts must be made good to the finance company.

THE PLACE OF FINANCE COMPANIES.—The various types of legitimate finance companies have a place in the financial structure of the community. Their use is proper and appropriate under certain conditions. The service they

render is at times indispensable although expensive. The ordinary banking facilities and open-market borrowings are not available for certain forms of financing which have become necessary through the development of the installment payment feature in many lines of trade. Likewise new businesses and those which cannot obtain sufficient bank loans to furnish them with adequate working capital must have some other recourse for loans. Out of this situation the finance companies have developed. But there should be no concealment from customers nor from creditors on the part of borrowers. The difficulties of concealment frequently lead to fraud by borrowers. This fact has given rise to severe criticism of finance companies.

Federal Reserve System

DEVELOPMENT OF SYSTEM.—Until the Civil War with the exception of the First and Second United States Banks, banking was conducted under the laws and practices of the several states. In order to provide a uniform and safe banknote currency and to afford fiscal agencies for the government, the **National Banking Act** was passed in 1863. Defects soon appeared, but these were mostly of a technical nature and were remedied by a revision of the act in 1864 and by subsequent amendments. The national banking system was such an improvement over the systems of banking which had existed in many of the southern and western states that changes of a thoroughgoing nature were not considered necessary.

The panic of 1893, the first serious one since the United States had resumed specie payments in 1879, revealed some of the weaknesses of the national banking system and the panic of 1907 aroused the country to the need of a decided change in our banking methods. In 1908 Congress passed the **Aldrich-Vreeland Act,** a confessedly temporary measure, but which provided for an emergency currency to be issued during panics and which also brought about the appointment of the National Monetary Commission to make a thorough study of the banking problem. After much investigation, discussion and criticism the movement for banking reform developed rapidly and in December, 1913, the **Federal Reserve Act** was enacted.

FEDERAL RESERVE DISTRICTS.—In furtherance of the provisions of the act the United States was divided into twelve reserve districts (Fig. 9), which was done on a commercial and industrial rather than a geographical basis. Each district has its own Federal Reserve bank with such branches as may be needed to furnish adequate banking facilities for the member banks. Other particulars of the Federal Reserve districts, such as their size, the location of the reserve banks, and branches, their paid-in capital and surplus, is indicated by the tabulation on page 1263.

CAPITAL OF FEDERAL RESERVE BANKS.—The capital stock of the Federal Reserve banks is owned entirely by the member banks of the district. Each member bank subscribes a sum equal to 6% **of its paid-up capital and surplus,** and when a bank already a member increases its capitalization or surplus it must at the same time increase its subscription. Half this subscription is payable in one immediate payment and the rest at the call of the Federal Reserve Board. When a bank reduces its capital and surplus or withdraws from the system, it is refunded a portion or the whole of its investment. On the paid-in stock, the member banks receive **dividends** at the rate of 6% per annum which are cumulative. **Excess net earnings** of the reserve banks are carried to surplus until this equals 100% of the subscribed capital, after which

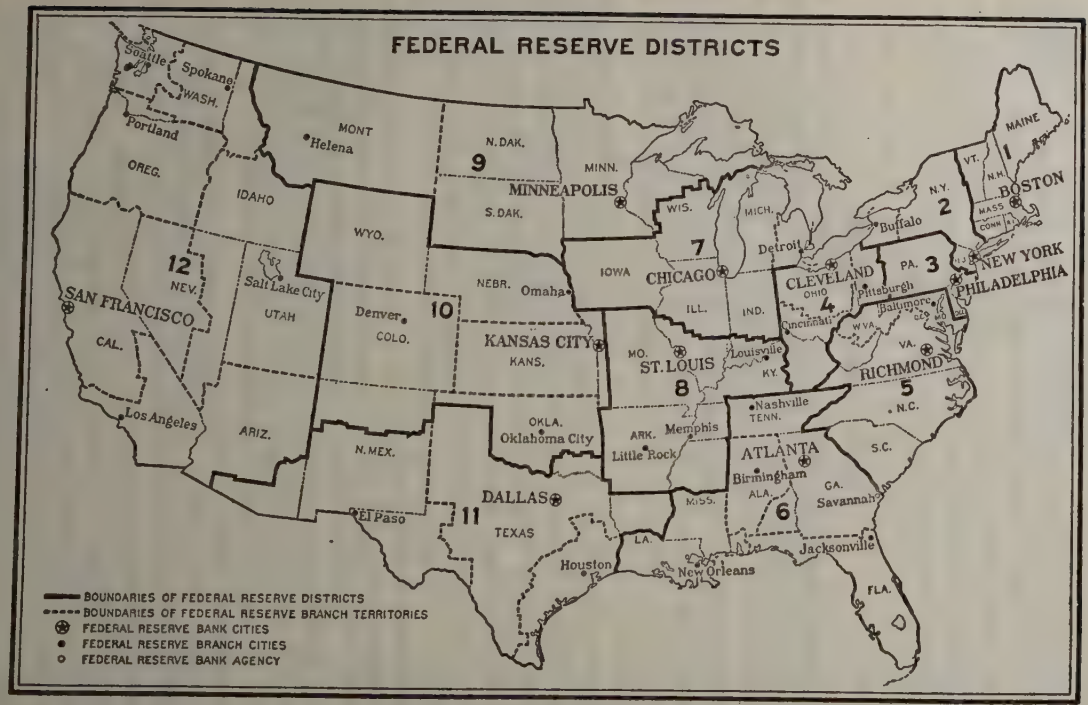

FIG. 9. Federal Reserve Districts

Size of Federal Reserve Districts

Dist.	Location of Reserve Banks	Branches	No. of Member Banks	Territory in Square Miles	Capital of Federal Reserve Banks	Surplus of Federal Reserve Banks
					(000 omitted)	(000 omitted)
1	Boston	None	424	66,465	$ 7,532	$12,351
2	New York	Buffalo	835	49,170	24,677	51,308
3	Philadelphia	None	722	39,865	8,340	13,069
4	Cleveland	Pittsburgh, Cincinnati	877	183,995	10,162	13,712
5	Richmond	Baltimore	627	173,818	4,876	8,067
6	Atlanta	New Orleans, Jacksonville, Birmingham, Nashville	525	233,860	3,841	7,050
7	Chicago	Detroit	1,427	176,940	13,490	23,917
8	St. Louis	Louisville, Memphis, Little Rock	624	146,474	4,266	5,884
9	Minneapolis	Helena	940	437,930	3,294	5,178
10	Kansas City	Omaha, Denver, Oklahoma City	1,122	509,649	4,314	8,395
11	Dallas	El Paso, Houston	849	404,826	3,821	4,152
12	San Francisco	Seattle, Portland, Spokane, Salt Lake City, Los Angeles	802	693,658	6,395	11,662
	TOTAL		9,774	3,116,650	$95,008	$164,745

90% goes to the United States government and 10% to surplus. Up to January 1, 1925, the reserve banks had turned over $139,000,000 to the government.

MEMBERSHIP IN FEDERAL RESERVE SYSTEM.—**National banks** must join the Federal Reserve System or surrender their charters. Incorporated state banks and trust companies may become members if they so desire. On April 6, 1925, there were 9,531 member banks of which 8,010 were national and 1,521 were state banks. The total resources of all member banks amounts to $40,000,000,000. The law provides that **state institutions** may become member banks and not lose their rights under the state charters. They must meet the same unimpaired paid-up capital requirements of national banks, excepting that they may become members if their capital amounts to only 60% of the capital requirements of national banks provided that the deficiency is made up within five years. National banks in cities of 3,000 people or less must have a capital of $25,000; in cities of from 3,001 to 6,000, a capital of $50,000; in cities of from 6,001 to 50,000 a capital of $100,000; in cities with more than 50,000 people a capital of $200,000. State banks must subscribe to the capital stock of the district banks, maintain the reserves required by the act, make the same reports, and be subject to similar examinations.

Upon becoming members of the Federal Reserve System state banks must conform to the laws imposed upon national banks prohibiting them from **lending on or purchasing their own stock,** and to those laws relating to the **withdrawal or impairment of their capital** and the **payment of unearned dividends.** Their officers and employees become subject to the national bank statutes covering penal offenses. They are required to present to the Federal Reserve banks reports of their condition and of dividends paid. They are subject to **examinations** by examiners selected or approved by the board of the reserve bank although the reserve bank may accept the examinations made by the state authorities.

ADVANTAGES OF MEMBERSHIP.—Some of the reasons prompting a state institution to join the system are:

1. It may retain its state charter and state statutory powers, and in addition enjoy the advantages of the Reserve System.
2. It benefits by the **par collection system,** in the easy transfer of funds by draft or telegraph and the shipment of funds without cost.
3. It may borrow from the reserve bank or **rediscount** at low rates and with more certainty of accommodation than from its correspondents, particularly in times of stress.
4. It may carry with safety substantially **lower reserves,** and invest excess in earning assets.
5. Membership tends to satisfy the moral obligation to contribute to the strength and unity of the banking system, particularly in time of war.
6. It acquires the right of receiving **postal savings and other federal governmental deposits.**
7. It gains the **prestige** of examinations made under the supervision of the federal government.
8. It gains the **advertising value of membership** in the system.
9. It may obtain **better prices for its own acceptances** from the reserve banks.
10. It has the benefit of **special services** which the Federal Reserve banks may develop for their member banks such as purchasing and caring for commercial paper, clearing out-of-town checks, etc.

DISADVANTAGES OF MEMBERSHIP.—The principal disadvantages of membership to state banks are:

1. The **loss of interest on the Reserve balances** carried with the Federal Reserve banks.

2. The **loss of collection and exchange profits.** Non-member banks are able in some cases to make collections and exchange charges which as member banks they cannot.

3. Expense of the **additional examinations** and reports required.

4. **Limitations on individual loans.** Under the Federal Reserve System national banks are limited in their loans to any one concern to 10% of the bank's capital and surplus, while some states allow their banks to make such loans to 25% of their capital and surplus.

State banks in the Reserve System may with limitations retain their charter and statutory rights. Their individual loans over 10% of their capital and surplus are not eligible for rediscount.

FEDERAL RESERVE BOARD.—The Federal Reserve Board, with its offices in Washington, co-ordinates and controls the whole Reserve System. This Board consists of **eight members.** The Secretary of the Treasury and the Comptroller of the Currency are members ex-officio. The six others are appointed by the President by and with the advice and consent of the Senate for terms of 10 years each. Not more than one member of the board can come from a single reserve district. No member of the board may be an officer, director, or stockholder of any bank. The President is empowered to name one of the six appointed members as **"governor"** who is the chief operating officer and in the absence of the Secretary of the Treasury acts as chairman at meetings of the Board.

The Board is responsible for the success of the System and is clothed with such important **powers as:**

1. To examine the Federal Reserve banks and member banks, and to require weekly statements from the reserve banks.
2. To permit or, on the affirmative vote of at least five members of the Board, to require, Federal Reserve banks to **rediscount the discounted paper of other Federal Reserve banks** at rates fixed by the board. Inter-district borrowings were carried on to a very large extent from 1919 to 1921, when the reserve ratios of some of the reserve banks was very low.
3. To **suspend reserve requirements** for limited times under certain conditions.
4. To supervise and regulate, through the Comptroller of the Currency, the **issue and retirement of Federal Reserve notes.**
5. To add to the number of cities classified as reserve and central reserve cities, or to reclassify them, or to terminate their designation as such. Thus St. Louis in 1922 was reclassified as a reserve city. Prior to that time it had been a central reserve city.
6. To suspend or remove any officer or director of any Federal Reserve bank.
7. To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal Reserve banks.
8. To suspend, for violations of law, the operations of any Federal Reserve bank, to take possession of it, administer it during suspension, and when deemed advisable, to liquidate or reorganize it.
9. To require bonds of Federal Reserve agents; to make regulations for the safeguarding of all collateral bonds, Federal Reserve notes, money, etc.; to prepare rules and regulations for the conduct of all

business required under the law; and to employ such attorneys, experts, etc., as may be deemed necessary to the conduct of the Board.

10. To permit or compel Federal Reserve banks to **establish branches** within their districts, and to permit them to establish branches, agencies or correspondents abroad or in our insular possessions, and to authorize member banks to establish branches abroad.
11. To require Federal Reserve banks to buy from national banks at par the 2% United States bonds bearing the circulation privilege offered by them for sale.
12. To readjust Federal Reserve districts.
13. To assess the expenses of the Board upon the Federal Reserve banks.
14. To define the character of **paper eligible for discount** for member banks, and prescribe rules and regulations as to rediscounting and open-market operations.
15. To review and determine the **rates of discount** fixed by the Federal Reserve banks.
16. To act as a **clearing house for the Federal Reserve banks** and to require the reserve banks to act as clearing houses for member banks.

The **administrative duties** of the Board consist of the approving of discount rates, granting power to member banks to accept bills drawn upon them up to 100% of their capital and surplus, the preparation of reports, determination of salaries, passing on increases and decreases of capital stock of the reserve banks, and so forth.

COMPTROLLER OF THE CURRENCY.—The **powers and duties** of the Comptroller's office as they have developed under the national bank laws and as they exist under the Reserve Act are, in part, as follows:

1. To determine whether an organizing national bank has or has not satisfied the conditions prerequisite to issuing a certificate authorizing it to commence business; to issue such certificates or withhold them for good cause; to determine the maximum and minimum capitalization of a national bank; to issue permits to increase or decrease the capital stock of such banks; to allow it to merge with other banks; to extend charters; to approve the name or change of name of a bank; to require and file oaths of directors; and the like.
2. To take possession of defaulting national banks, appoint receivers, liquidate the banks, cancel their notes, and pay depositors.
3. To care for the issue, redemption, security, withdrawal, and cancellation of national bank notes. This includes the engraving of plates and the making of dies and the custody of same; the printing of new notes and the custody of new and old notes; furnishing notes to banks; issuing new notes for those worn or mutilated; calculating and watching the 5% redemption fund; requiring deposits of bonds and increases of such deposits if values fall; examining bonds, notes, dies, etc.; transferring these bonds for owners; redeeming notes, etc.
4. To appoint examiners and conduct examinations of all national banks and of all banks in the District of Columbia.
5. To report to Congress annually the condition of the national banks, and of state banks, banking companies and savings banks.

FEDERAL ADVISORY COUNCIL.—The Federal Advisory Council was established by the Reserve Act as a means of voicing the **banking opinion of the country** and of rendering advice to the Federal Reserve Board. It is composed of a member from each reserve district selected by the board of directors of the

serve bank of the district. The meetings of the Council are held at Washington at least four times each year and oftener if called by the Federal Reserve oard. The Council may call such additional meetings in Washington or elsewhere as it deems necessary, may elect its own officers and adopt its own methods of procedure. As its name indicates, it acts in an advisory or consultative apacity.

MANAGEMENT OF FEDERAL RESERVE BANKS.—Each Federal Reserve bank is managed by a **board of directors** consisting of nine members. The membership of the board is divided into three equal groups known as class A, class B, and class C directors. **Class A directors** are chosen by and are representatives of the stockholding member banks. **Class B directors** are persons actively engaged in some commercial, agricultural and industrial pursuit in the Federal Reserve district of the bank. They are chosen by member banks.

Class C directors are selected by the Federal Reserve Board and are in effect the representatives of the government. One of these is designated by the Federal Reserve Board as the **Federal Reserve agent,** who is chairman of the local board of directors and in charge of the auditing, note issues, member bank relations, bank examination and statistics department. The board of directors elects the **governor of a Federal Reserve bank,** who is in charge of the operating departments. He is not a member of the board.

FUNCTIONS OF FEDERAL RESERVE BANKS.—The functions of the Federal Reserve banks may be summarized as follows:

1. They hold the **reserves** which member banks are required to maintain against their own deposits.
2. They **advance funds** to member banks upon the security of government bonds and **rediscount such paper** as they may possess which is eligible.
3. They provide an **elastic bank-note currency** for the country which fluctuates with business and trade needs.
4. They provide facilities for the **transfer of funds** and for the **clearance of checks** for members.
5. They act as **government depositaries** and fiscal agents.
6. They assist in the **financing of foreign trade** and may establish **foreign branches.**
7. They issue bulletins on banking and business conditions.

A Federal Reserve bank renders practically the same service for banks as they render for their customers. It receives money on deposit from and loans to its members. Every member bank is obliged by law to keep on deposit with its Federal Reserve bank funds to a certain proportion of the deposits it has received from its customers. This is called a "reserve," and as the Federal Reserve banks keep the reserves of their members, they are called "Reserve" banks. At times member banks borrow from their Federal Reserve banks just as individuals borrow from their own bank.

A RESERVOIR OF CREDIT.—The Federal Reserve banks may be thought of as a system of twelve reservoirs, each of which serves the needs of the member banks in its own district. In each of these reservoirs credit is stored up and supplied to the member banks, as the need arises, and through them to their customers. Member banks may borrow to meet the **seasonal needs** of their customers, such as arise at the crop-sowing period, or may borrow in order to assist their customers in **periods of panic or depression.** The member banks deposit in the Federal Reserve banks most of the gold they formerly kept in their own vaults and some of the money they used to keep on deposit with other

banks. It is the gold which Federal Reserve banks acquire in this and other ways that gives them the ability to make loans and issue bank notes.

FEDERAL RESERVE BANK AND MEMBER BANK RESERVES.—Each Federal Reserve bank must maintain a reserve in gold or lawful money of not less than **35% against its deposits,** and a reserve of gold (including gold certificates) of not less than **40% against its Federal Reserve notes** in actual circulation. Prior to the enactment of the Federal Reserve Act the reserves of national banks had been carried either in their own vaults or as deposit accounts with reserve city and central reserve city banks. The object of the Act was to concentrate these reserves in order to make them more effective and to employ them for more strictly commercial purposes. Under the Act every member **country bank** keeps a reserve balance with its federal reserve bank of 7% against its demand deposits; a **bank in a reserve city,** a reserve of 10%; and a bank in a central reserve city, a reserve of 13%. On **time deposits** all classes of banks maintain a reserve of 3%. Under these percentages the amount of reserve which must be held is less than originally prevailed. But as the reserves are concentrated and as funds may be quickly borrowed from the reserve banks, it is not necessary for member banks to keep on hand large amounts for emergency. Many states now permit state member banks to keep reserves in accordance with the provisions of the Federal Reserve Act.

REDISCOUNT FUNCTION OF RESERVE BANKS.—Certain of the promissory notes and acceptances held in the portfolio of banks may be rediscounted with the Federal Reserve banks. This gives to such commercial paper the qualities of a **secondary reserve.** Member banks resdicount when they are in need of funds to meet their customers' demands for additional credit or to meet withdrawals of deposits.

A Federal Reserve bank may discount for any of its member banks any notes, draft, or bill of exchange provided:

1. It has a maturity at the time of discount of not more than 90 days, exclusive of days of grace; but if drawn or issued for agricultural purposes or based on livestock, it may have a maturity of not more than 9 months. Nine months' agricultural paper may be rediscounted for a Federal Intermediate Credit bank provided it does not bear the endorsement of a non-member state bank or trust company which is eligible for membership.

2. It is a bill of exchange payable at sight or on demand drawn to finance the shipment of readily marketable agricultural products.

3. It arose out of actual commercial transactions; that is, it must be a note, draft, or bill of exchange, which has been issued or drawn for agricultural, industrial, or commercial purposes or the proceeds of which have been used or are to be used for such purposes.

4. It was not issued for carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the government of the United States.

5. The aggregate of notes, drafts, and bills bearing the signature or endorsement of any one borrower rediscounted for any one member bank shall at no time exceed 10% of the unimpaired capital and surplus of such bank; but this restriction shall not apply to the discount of bills of exchange, drawn in good faith against actually existing values.

6. It is endorsed by a member bank.

7. A Federal Reserve bank may also discount for a member bank bankers' acceptances indorsed by at least one member bank and running for not more than 90 days, providing they grow out of transactions concerned with the importation and exportation of goods, or providing they grow out of the domestic

pment of goods, and shipping documents are attached. Of like purpose is power to purchase bills drawn by foreign bankers on member banks for the rpose of furnishing dollar exchange.

The object of these provisions is to limit the privilege to operations connected th the process of immediate production, manufacture, and marketing of ods. The Federal Reserve Board carefully defines the various kinds of com-rcial paper as, (1) promissory notes, (2) bills of exchange and trade accept-ces, or (3) 9 months' agricultural paper; and for these different classes of per determine the rates of discount it will charge.

Not only may a reserve bank rediscount the commercial paper presented its member banks, but it may **loan directly** to those banks. Such loans ust have maturities not exceeding 15 days though they may be renewed. he note of the borrowing bank must be secured by commercial paper eligible r rediscount, or by government securities.

CONTROL OF REDISCOUNTS.—The reserve banks endeavor to control e borrowings of member banks so that they will apply for funds only to meet gitimate demands for credit. The Federal Reserve banks act independently, it under the approval of the Federal Reserve Board, in establishing rates the different classes of paper which they discount for member banks. These tes usually rule higher than rates on bankers' acceptances and Treasury rtificates of indebtedness but lower than rates on commercial paper and on ll of credit loans. The rediscount rate in August 1925, at the Federal Reserve nk of New York was 3½% while the rate on prime 4–6 months' commercial per, as well as the call loan renewal rate, ruled at 4%.

INTER-DISTRICT BORROWING.—A reserve bank which has extended edit up to the limit allowed by its reserves may replenish its reserves by **discounting with other reserve banks.** In this way the resources of all serve banks are made available to all member banks throughout the country. his feature tends to equalize credit conditions throughout the country. Credit t needed in one section is promptly made available wherever needed.

OPEN-MARKET OPERATIONS.—In addition to their dealings with member nks, the Federal Reserve banks may engage in certain open-market operations ith member or non-member banks, corporations, firms and individuals. The ederal Reserve banks may buy and sell—

1. At home and abroad cable transfers, bankers' and trade acceptances of the kinds and maturities made eligible for rediscount with or without the endorsement of a member bank.
2. Through foreign correspondents, bills of exchange which arise from actual commercial operations, which mature within 90 days, whether these be drawn in dollars or some foreign currency.
3. United States obligations and municipal warrants.
4. When the public interest so requires, acceptances of the Federal Intermediate Credit banks and of the National Agricultural Credit corporations.
5. May deal in gold coin and bullion.

Through its open-market powers the reserve banks may invest their resources nen rediscounting is slight in order to meet their operating expenses; may sist in the financing of the foreign trade of the United States and in the building of a discount market in New York City; may aid foreign nations to establish e gold standard as was done in the case of England; may check inflation and eculation by mopping up surplus funds in the market. The open-market ovisions are very necessary and important in enabling the reserve banks to

influence credit conditions. As the following table shows, open-market purchases were more important than rediscounts in 1916, and have increased in relative importance in recent years. During and immediately following the war, rediscounts by member banks exceeded open-market purchases.

The Discount and Open-Market Operations of the Federal Reserve Banks

(In Millions of Dollars)

Year	Bills Discounted for Member Banks	Open-Market Operations		
		Acceptances Purchased	United States Securities Purchased	Municipal Warrants Purchased
1914	$ 21	.....	$ 0.2	$ 0.7
1915	161	$ 65	16	66
1916	208	386	57	91
1917	8,969	1,078	89	17
1918	39,753	1,810	5,850	2
1919	79,174	2,825	4,738	.....
1920	85,321	3,218	7,988	.....
1921	57,759	1,534	3,847	1
1922	22,083	1,955	4,506	0.2
1923	38,380	2,547	3,501	0.5
1924	15,419	2,172	2,257	15

ISSUE OF FEDERAL RESERVE NOTES.—The Act provides for the issue of Federal Reserve notes by the Federal Reserve Board through the Federal Reserve Agent to the Federal Reserve banks in exchange for an equal amount of collateral in the form of notes, drafts, bills of exchange, acceptances, bankers' acceptances, gold and gold certificates. If the volume of loans made by member banks is large and the latter seek rediscounts at the reserve banks and wish the proceeds in the form of money, a large volume of notes will be issued. If commerce and industry decline, necessitating a less demand for rediscounts, the volume of notes will shrink. When a business transaction is closed and the debtor of the member bank settles this obligation, the commercial paper underlying the Federal Reserve notes is liquidated and the reserve notes are withdrawn from circulation.

The **expansion and contraction of the** Federal Reserve note circulation to meet the trade and business needs of the country has introduced the quality of elasticity into the currency system of the United States.

CHECK COLLECTIONS AND TRANSFER OF FUNDS.—Check collection in the United States had long been unorganized and was each year imposing on business an increasing burden of expense and inconvenience. The twelve Federal Reserve banks and their branches, with a central jointly owned gold fund in Washington for the settlement of accounts between districts, forms today an effective organization for the transfer of funds about the country and the rapid, direct and economical routing and collection of checks. The **transfer of funds by telegraphic advice and book settlement** has replaced the expensive and dangerous shipments and reshipments of currency and coin by express. The Federal Reserve check collection system cut in half the average time required to collect checks, and greatly reduced the cost. Under the old system of collecting out-of-town checks the correspondent banks in reserve and central reserve cities were utilized for the purpose, the service being performed by these banks

partial compensation for the use of the reserve and other funds deposited th them by country banks.

Under a ruling of the Federal Reserve Board every Federal Reserve bank is uired to exercise the functions of a **clearing house for its members** and for tain qualified non-member banks, known as "clearing member banks." nder this system each Federal Reserve bank is to receive at par (without llection charges) checks drawn on all member and clearing member banks, d on all other non-member banks which agree to remit at par through the deral Reserve bank of their district.

For instance, a member bank in New York City which receives a check awn on a bank in Albany, N. Y., accepts the check from its customer at par d sends it to the Federal Reserve Bank of New York, which in turn sends it rectly to the member bank in Albany for collection. Since all banks within a ven district have deposit accounts with the Federal Reserve banks, the counting may be taken care of merely by debiting and crediting the accounts member banks at the Federal Reserve bank. The proceeds of the check, owever, are not made available for withdrawal by the New York bank or unted as a part of its reserve until sufficient time has elapsed to permit it to actually collected and the funds returned to the Federal Reserve bank. The mount of time that must elapse before it can be counted as reserve varies with e distance of the bank upon which the check is drawn from the Federal eserve bank which is collecting it.

Every Federal Reserve bank receives also at par checks drawn upon any bank ithin its district whose checks can be collected at par, when presented by serve banks outside the district. That is to say, if a check drawn on a hicago bank is cashed by a member bank in San Francisco it will be sent to e Federal Reserve Bank of San Francisco, and in turn to the Federal Reserve ank of Chicago, where it will be received at par and be collected from the ank upon which it is drawn. Inter-district clearings are effected through the old settlement fund which is under the supervision of the Federal Reserve oard in Washington.

GOLD SETTLEMENT FUND.—The Federal Reserve Act requires each ederal Reserve bank to forward to the Treasury at Washington, for credit to e account of the gold settlement fund, under the administration of the Federal eserve Board, $1,000,000 in gold or gold certificates, plus an additional amount qual to its indebtedness at the moment to the other Federal Reserve banks. t 10:00 A. M., eastern standard time, each bank sends a telegram to the Federal eserve Board stating the amount it has credited to other Federal Reserve anks during the preceding day. Just as the Federal Reserve Bank of Chicago ow effects the settlement of the daily balances of Chicago clearing house banks y increasing or decreasing the deposit accounts of each bank, as determined y the record of the daily clearings, so the Federal Reserve Board adds to or ubtracts from the account of each Federal Reserve bank in the gold settlement und. In case the balance of any Federal Reserve bank falls below $1,000,000, must be immediately replenished by the sending of additional gold to the reasury. The balance thus maintained by each Federal Reserve bank is unted as a **part of its legal reserve against deposits.** The establishment of is gold settlement fund has rendered almost negligible the volume of money at needs to be shipped from one section of the country to another.

RELATION OF FEDERAL RESERVE BANKS TO THE GOVERNMENT.—ederal Reserve banks are **not directly managed or controlled by the govern-ent,** but the **relationship** of the government to the new system is **close and**

intimate. The Federal Reserve Board is appointed by the President, by and with the advice and consent of the Senate; the Federal Reserve Board has a voice in selecting one-third of the board of directors for each of the twelve district banks; the federal reserve notes are direct obligations of the United States; a certain portion of the excess profits of the bank must be paid to the government as a franchise tax, and the reserve banks must perform for the government certain fiscal agency operations. On the other hand, the several regional banks are not under the direct control of the government, for each board of directors can, subject to the supervisory powers of the Federal Reserve Board, manage its own affairs. The chairman of the board of directors of each reserve bank is, however, appointed by the Federal Reserve Board. As fiscal agents of the federal government, the Federal Reserve banks take charge of the placing of government loans and may hold government deposits.

REPORTS ON BUSINESS CONDITIONS.—The Federal Reserve Board issues monthly the **Federal Reserve Bulletin** which deals with the developments in business finance and commerce, and gives reliable statistics indicating the current trend of business. In a similar manner each reserve bank keeps in close touch with business conditions and publishes monthly bulletins for free distribution.

SERVICES RENDERED THE BUSINESS COMMUNITY.—While the Federal Reserve banks are thought of usually as bankers' banks and as fiscal agents for the government, they do directly and indirectly render many invaluable services to business men. They stand ready to purchase bankers' acceptances from exporters and importers and others engaged in foreign and domestic trade. Through their efforts nearly 90% of the banks of the country remit at par, thereby lifting the toll which was formerly imposed on domestic trade. Extreme seasonal changes in interest rates and money panics have been eliminated. The money market has been stabilized. A beginning has been made toward the elimination of the ups and downs in business, toward the mitigation of the amplitude in the business cycle. Perhaps of more importance than all these is that their presence has introduced a **feeling of confidence in banking and business circles.** The feeling of uncertainty, so prevalent prior to the passage of the Reserve Act, has gone.

THE FEDERAL RESERVE STATEMENT.—On Friday of each week there are issued by the Federal Reserve Board separate statements as of the proceeding Wednesday for each of the twelve reserve banks and a combined statement for the entire system. The assets and liabilities are set forth in such detail as to enable those who are interested to follow very closely the operations of the Reserve System. The statement of June 17, 1925, together with an explanation of the various items is given in the following tabulation:

Resources or Assets

1. Gold with Federal Reserve Agents..... $1,500,333,000
   This is the gold lodged by the reserve banks as **partial collateral** against the reserve notes received from the reserve agent. The reserve agent is appointed by the Federal Reserve Board to act as the chairman of the board of directors of a reserve bank. He represents the United States government and inasmuch as reserve notes are obligations of the government, he is entrusted with the duty of holding the collateral against which they are issued.

2. Gold Redemption Fund with United States Treasury..... $ 38,062,000
The Reserve Act requires that an amount in gold equal to at least 5% of the reserve notes which are not entirely covered by gold, be maintained by the reserve banks with the United States Treasury to redeem such of the notes as are presented at Washington for redemption. Since one reserve bank may not issue the notes of another reserve bank which have fallen into its possession, excepting upon the payment of a 10% tax, such notes are immediately sent for redemption, either directly to the issuing reserve bank or to the Treasury Department, in which case they are redeemed out of this 5% fund. This fund may count as part of the gold reserve against reserve notes.

3. Gold Held Exclusively against Federal Reserve Notes..... $1,538,395,000
This is a total of items 1 and 2. It will be noted that this amount is only approximately $100,000,000 less than the amount of reserve notes in actual circulation. The reserve notes are virtually gold certificates.

4. Gold Settlement Fund with Federal Reserve Board..... $ 678,157,000
This is the fund held by the Reserve Board in trust for the reserve banks through which **clearings and transfers** are effected between the twelve banks. It may be counted as part of the 35% gold and lawful money reserve which must be held against the deposit liabilities of the reserve banks.

5. Gold and Gold Certificates held by the Reserve Banks.... $ 604,515,000
This is in the vaults of the reserve banks and is used to meet **withdrawals of cash,** etc. This as well as the next item may be counted as part of the 35% gold and lawful money reserve held against deposits.

6. Reserves Other than Gold..... $ 146,659,000
This includes lawful or legal tender money such as greenbacks, Treasury notes of 1890, and standard silver dollars.

7. Total Reserves..... $2,967,726,000
Items 1, 2, 4, 5 and 6.

8. Non-revenue Cash..... $ 54,613,000
This includes the money in the vaults of the reserve banks which does not possess the legal tender power, such as national bank notes and the notes of the other reserve banks awaiting redemption.

9. Bills Discounted:
Secured by United States Government Obligations..... $ 248,122,000
These for the most part represent the **15-day promissory notes** of member banks secured by government obligations.
Other Bills Discounted..... $ 193,842,000
These represent the **eligible paper** in the portfolio of member banks which they have rediscounted with the reserve banks. There is a strong seasonal movement

in this item, increasing as it does when member banks feel a pressure for funds during the crop moving period and the holiday trade.

10. Bills Bought in Open Market..... $ 246,083,000
These are the bankers' and trade acceptances (mostly bankers') which the reserve banks purchase in the open market. This item usually increases in the fall as the exports of raw materials move from the United States to Europe.

11. United States Securities Purchased..... $ 306,399,000
These are the United States bonds, Treasury notes and certificates of indebtedness purchased by the reserve banks. In purchasing these the twelve reserve banks **act as a unit** so that the credit policies adopted by one will not nullify those adopted by another. Purchases and sales are made with a view of stabilizing the money market and of checking inflation and speculation.

12. Foreign Loans on Gold..... $ 10,500,000
These are loans made to foreign banks entirely secured by earmarked gold held in the vaults of a central bank which happens to be one of the foreign correspondents of the reserve banks.

13. Other Earning Assets..... $ 2,250,000

14. Total Earning Assets..... $1,007,196,000
For the past several years this item has fluctuated about $1,000,000,000. A continuous investment at 4% of slightly more than $1,000,000,000 will enable the reserve banks to meet their expenses. Though they could easily do so, they should not invest a larger amount than this for such a policy would tend only to lower interest rates artificially and promote inflation. The reserve banks are **not profit-making institutions.** Their function is to act as a stabilizer of economic conditions.

15. Uncollected Items..... $ 811,856,000
These are the checks which are being collected through the reserve banks. This item is largely offset by "Deferred availability items" among the liabilities.

16. Bank Premises..... $ 60,162,000
Of this amount more than 50% is accounted for by the premises of the New York, Cleveland and Chicago Reserve Banks.

17. Other Resources..... $ 21,136,000

18. Total Resources..... $4,922,689,000

Liabilities

19. Capital Paid In..... $ 115,543,000
The capital stock is entirely owned by the member banks. This amount is 3% of the total capital and surplus of all member banks.

20. Surplus.....$ 217,837,000
The Federal Reserve banks are allowed to accumulate a surplus equal to 100% of their subscribed capital after which 90% of net earnings are turned over to the government and 10% is carried to surplus.

21. Federal Reserve Notes in Actual Circulation.....$1,643,047,000
At the present time the Federal Reserve notes form about **35% of the total amount of money in circulation** in the United States.

22. Deposits:
Member bank reserve account.....$2,212,772,000
These are the funds which member banks are required to keep on hand with the reserve banks as **reserve against their own deposit liability.**
Government.....$ 5,364,000
Deposits of the United States government.
Other.....$ 26,466,000
These represent deposits made by foreign central banks, by non-member clearing banks, etc.

23. Total Deposits.....$2,244,602,000

24. Deferred Availability Items.....$ 687,156,000
These are the checks in the process of collection through the reserve banks which will be credited as soon as collected to the deposit account of member and non-member clearing banks.

25. Other Liabilities.....$ 14,504,000

26. Total Liabilities.....$4,922,689,000

Reserve Ratio.—On this particular date the ratio of the total gold, gold certificates and legal tender money held by the reserve banks amounted to 76.3% of the total deposit and note liability combined. This ratio should be maintained at a fairly high figure, as the United States is acting today in a certain sense as the trustee of a large part of the world's monetary stock of gold which will be withdrawn and redistributed as Europe solves her economic and currency problems.

Important Items in the Statement.—The items which should be closely followed in this statement are **bills discounted, bills bought in open market, and U.S. government securities.** The first is an evidence of the member banks' need for funds. The second is an indication of the extent to which the discount market is forced to rely on the reserve banks. The third, which often moves inversely to the other two, reflects directly the credit policies of the reserve banks. Government securities are purchased and sold in order that prices and interest rates may be fairly stabilized and inflation and speculation checked.

SIGNIFICANCE OF THE RESERVE RATIOS.—As explained elsewhere, banks that are members of the Federal Reserve System must maintain their entire reserve with their respective reserve bank. **Money in their own vaults** does not constitute reserve funds. It must be on deposit with a reserve bank. As a rule member banks do not maintain deposits with the reserve bank in excess of those required by law. The excess is withdrawn and loaned on the call loan market or invested in bonds and commercial paper. On May 15, 1925, the 8,010 national banks had deposits with the reserve banks amounting to

$1,275,496,000, which was only $14,749,000 in excess of the amount required by law. Not only was it true on that particular date, but it is generally true, that banks in the United States pare down their reserves to the legal minimum. The minimum reserves as fixed by law became the actual reserves. Since this practice is the customary one, the reserve ratios of member banks have little significance.

There was a time when the reserves, especially the surplus reserves, of the New York Clearing House banks were followed closely as a barometer of credit and banking conditions. The surplus reserves constituted really the only available supply of unused credit in the United States. Now that the New York banks may easily and even profitably make up deficiencies in reserves by rediscounting with or borrowing from the Federal Reserve Bank, the reserves of the Clearing House banks are of little importance. At the present time the **reserve ratios really significant** are those of the Federal Reserve banks. The ratio of their gold reserves to their note and deposit liabilities is an indication of the amount of additional credit available for trade and production. As this ratio declines, the probability is strong that the bank rate will be raised; and as the ratio increases, that the bank rate will be lowered. The reserve ratios fluctuate with the demand for credit and forecast changes in the reserve bank rates. At the immediate moment the reserve ratio of the Federal Reserve banks is so very high (76.3%) that a considerable decline could take place without necessarily causing the bank rate to rise. Though it is significant, it does not possess the same importance as it did in 1920 when it was hovering just above the legal minimum.

SECTION 24

PROFIT-SHARING PLANS

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SECTION 24

PROFIT-SHARING PLANS

DEFINITIONS.—The Encyclopedia Brittannica (eleventh edition) defines profit-sharing as follows:

"**Profit-sharing** (i.e., between employer and employee) is a method of remunerating labor under which the employees receive in addition to ordinary wages a share of the profit which the business realizes. The term is not infrequently used loosely to include many forms of addition to ordinary wages, such as bonus on output or quality, gain sharing and product bearing. Yet strictly, where an employee or group works for a share of the products, or is paid so much in addition to ordinary wages in proportion as the product exceeds a certain standard, in neither of these cases have we profit-sharing, for the net result of the business may be a large profit or a small one or a loss, and the employee is unaffected. In the same way if a workman is employed on the basis that if in doing a particular job he saves something out of a stipulated time or labor, or a stipulated amount of material, he shall receive in addition to ordinary wages a proportion of the value so saved, that is technically gain-sharing, not profit-sharing. Even where the bonus depends strictly on profit, it is not reckoned as profit-sharing if it is confined to the leading employees."

The British Board of Trade, in its report on "Profit-Sharing and Labor Copartnerships in the United Kingdom" (1912), defines "true profit-sharing" as follows:

"**Profit-sharing** is understood to involve an agreement between an employer and his work-people, under which the latter receive, in addition to their wages, a share, fixed beforehand, in the profits of the undertaking."

True profit-sharing plans, then, are agreements under which employers undertake to share their profits with some or all employees on a predetermined and definitely known basis, so that employees receive, in addition to their wages or salaries, compensation which varies with the profits of the business. Many so-called profit-sharing plans provide for compensation bearing no direct relation to the profits of the business, and so do not meet the full requirements of the above definitions. Such plans, for example, may provide for stock subscriptions at or below the market price, cash distributions on the basis of wages, production, length of service, or some other basis, or distributions in the form of gratuities. They have also been included in this section.

DEVELOPMENT OF THE PROFIT-SHARING IDEA.—Profit-sharing plans in the United States are of comparatively recent origin, although they have been in existence for many years in Europe. During the 19th century, there developed in this country a spirit of unrest among employees of many industrial concerns, the outcome of economic and social conditions. The growth of labor unions and the agitation caused by them brought to employers the necessity of attempting to meet the situation. Much thought was given to

welfare plans, personnel management and various forms of profit-sharing, and many plans were tried. Of the large number of so-called profit-sharing plans installed, many have failed and have been discontinued. Others have succeeded, and new ones have been installed. And while the experiments of employers have not brought uniform results, there is undoubtedly a growing interest in the subject.

ATTITUDE OF EMPLOYERS.—Among employers there is a **wide difference of opinion** as to the merits of profit-sharing. The National Civic Federation in 1919 made a study of the subject and reported the following reasons for and against the profit-sharing principle:

Favorable:

1. It promotes more continuous service.
2. It has made a 9% reduction in the cost of production.
3. It secures more regular attendance.
4. It builds up confidence.
5. It eliminates the rolling stones and encourages home building.
6. It is successful—never had a strike.
7. It enables the company to keep employees during the rush season.
8. It creates a better spirit among the workmen.
9. It keeps expenses down; salesmen work harder.
10. It tends to promote efficiency and stimulate endeavor.
11. It promotes regularity of employment.
12. It increases effectiveness and profits of the business.
13. It effects a noticeable increase in interest and loyalty on the part of those retaining their stock.
14. It produces a greater spirit of cooperation between employer and employee.
15. It is a great benefit in securing the cooperation of those in responsible positions.

Unfavorable:

1. Employees fail to grasp the significance of profit-sharing.
2. There is dissatisfaction on the part of employees when profits are small.
3. Employees count on bonus payments and make use of them in advance.
4. Employees prefer to have their wages increased instead of receiving a bonus.
5. Stock distributed to employees is often sold to outsiders.

ATTITUDE OF LABOR UNIONS.—Labor unions in general appear to be **opposed** to any form of profit-sharing. They contend that workers should receive fair wages and be allowed to look after their own interests; that money received under any plan represents only what should have been paid in wages; that gifts merely place workers under obligations and take away their opportunity for seeking increased wages to which they may be entitled; and that stock subscription plans are no better since dividends received on stock owned represent no additional compensation, but would be the same even if the stockholders were not employees.

The National Civic Federation, in its report on "Profit Sharing by American Employers," presents the attitude of trade unions toward profit-sharing as follows:

"So far as organized labor is concerned, it is generally opposed to all profit-sharing schemes. Theoretically, one would suppose that there could be no pos-

sible objection to the periodical cash distribution of a percentage of profits, and yet general criticisms on the part of the employees are:

That market wages are not paid where such cash distributions are made
That they prefer to have a fixed wage scale upon which they can count; and
That when such percentages of profits are received they are regarded as gifts, which place the workers under obligation to the employer and in a position in which they cannot ask for increase in wages or salaries to which they may be justly entitled.

"In relation to stock selling plans, some of the criticisms are:

That foremen will keep down the wages of the rank and file in order that the dividends on stock owned by the foremen may be higher;
That the aim of the company in selling stock is sometimes circumvented as in the case of the Northern Pacific Co., which experienced disappointment because the stock was sold to the employees at a low price and when it rose the employees promptly sold it instead of remaining participators and
That, although stock may be sold on the instalment plan, comparatively few in the rank and file can afford to take advantage of such opportunities;
Then there is the question of possible loss by a company in any given year and employees who are owners of stock are likely to become interested in watching the market and to cultivate the gambling instinct."

OBJECTS OF PROFIT-SHARING PLANS.—The chief objects of profit sharing plans may be summarized as follows:

1. Increased efficiency
2. Stability of labor
3. Cooperation
4. Continuous operation of business
5. Industrial peace

Increased Efficiency.—For the average employer who looks upon profit sharing as an incentive toward efficiency, the **most direct results** will perhaps be obtained among the managerial groups of employees or among employees whose individual efforts or results cannot be easily measured.

Stability of Labor.—Industrial executives realize the excessive cost of a large and rapid labor turnover. A shifting labor force is costly even among the lower grades which can be filled easily, but where specialized ability is required frequent changes in personnel are even more costly to an organization. Profit sharing plans are often used as a **means of reducing labor turnover** when other conditions, such as wages, salaries, working conditions and labor policies, are satisfactory.

The United States Bureau of Labor Statistics, in its report on "Profit Sharing in the United States" (Bulletin No. 208, page 170), states: "All the informants without exception were also of the opinion that the establishment of the plan had a tendency to reduce the percentage turnover of their working organization."

Cooperation.—Where cooperation is desired between employees and executives of different departments or branches, and particularly among inside salesmen and members of executive or managerial staffs, a sharing of the profits of the business as a whole should prove more effective than individual rewards in the way of bonuses or distributions of departmental premiums or profits.

Continuous Operation of Business.—Profit-sharing plans may be used as a means of continuing an established business when the owners wish to retire from active management without the withdrawal of their investment. The success of such an arrangement depends upon the type of profit-sharing plan adopted and also the managers selected. The profit and management sharing plans used by the Dennison Manufacturing Co., and the Maison Le Claire, are outstanding examples of such a continuance of an established business.

Industrial Peace.—Dr. Charles W. Eliot, President Emeritus of Harvard University, gives his concept of profit-sharing as "The Road Toward Industrial Peace":

"The arguments for and against profit-sharing take a wide range; and so do the experiments which are actually under way. Many of the experiments are so ill devised that they inevitably fail; and, on the other hand, some of those that succeed prove such valuable assets that their devisers conceal the nature and results of their experiments, lest their competitors imitate them. There is obviously no such thing as one best and uniformly applicable scheme of profit-sharing. Every individual factory should have its own scheme adapted to its own nature, history and surroundings; and so should every separate plant of a corporation or firm which maintains many scattered plants.

"Then, there are many industries to which profit-sharing cannot be applied at all, just as there are many to which the eight-hour day cannot be successfully applied, unless it be treated as merely an acceptable plan for raising wages. . . .

"Prudent advocates of profit-sharing never represent the method as applicable in all industries, or as the single cure-all for the industrial strife. They maintain that profit-sharing must always be associated with cooperative management, that is, with the effective sharing by the working people in the management and discipline of the works or shops, and also with complete accessibility of the accounts of the establishment for the elected representatives of the workers, whether members of the company's board of directors or merely auditors satisfactory to the employees. In other words, profit-sharing should be only one element in a scheme having three parts. The object to be attained in any hopeful reorganization of the machinery industries is a generous sharing of control and responsibility, and therefore of profits, when there are any, after wages and interest on borrowed money have been paid. Nothing short of that will give satisfaction to both parties in the present industrial strife, and nothing else ought to. To take together a long step on the road toward lasting peace employers and employees must be really partners, with like motives for diligence, the prevention of wastes, and the adoption of improvements. . . ."

FUNDAMENTAL PRINCIPLES FOR EFFECTIVE PROFIT-SHARING PLANS.—Although profit-sharing plans must be modified and adapted to meet the needs of each particular problem, there are certain principles which are fundamental in any plan.

Standard Wages.—An effective profit-sharing plan presupposes the payment of the prevailing rate of wages to the participants. The full market rate of wages must be guaranteed for ordinary service. In order to obtain further results in the way of special effort, cooperation, efficiency, attendance or continuity of service, it is necessary to offer some **incentive greater than ordinary wages.** That incentive may be supplied by some form of participation in profits, and the employer cannot expect to obtain important results through such profit-sharing unless the profits divided with employees represent something over and above the wages generally paid in the industry.

Definiteness of Plan.—A profit-sharing plan should be definitely set forth, preferably in the **form of an agreement,** so that its conditions and terms may be known and clearly understood. Any plan which is indefinite or dependent upon the periodical decision of the employer as to the profits to be distributed, will not have the confidence of employees.

Adequacy of Profits Distributed.—It is essential to the effectiveness of a profit-sharing plan that the profits distributed provide an appreciable addition to wages under normal successful conditions. Although there is no percentage which would be universally applicable in the distribution of profits, experience appears to indicate that in order to hold the sustained interest and effort of employees, it is necessary that the share of profits distributed approximate a **minimum of 5% or 6% of the wages paid.**

Adaptability of Plan.—Since forms of profit-sharing are so limitless and so diverse in character, it is necessary that each plan be specifically designed to meet the purpose or purposes for which it is intended. A plan devised to promote efficiency will differ from one designed to increase length of service, and a plan designed to hold employees until the demands of a seasonal business are satisfied, will bear only slight resemblance to the latter. **Time of payment,** for example, will depend upon the purposes of the plan. To hold employees throughout a busy season, payments should come after the close of that season. To provide stability of labor, payments would be deferred, with the provision that the employee leaving before the date of payment sacrifice his share of the profits. Some plans provide for a qualifying period of from 6 months to 5 years (the ordinary period being 1 year) before employees become eligible for profit-sharing.

The **Sears, Roebuck plan** is pointed toward such a stabilization of labor. An employee is eligible to participate in profit-sharing after 1 year of service, but does not receive any benefits in the way of payments until 9 years thereafter. He may deposit each year, after the qualifying period of 1 year, 5% of his annual salary, not to exceed $150. The company contributes one-third of its net profits after deductions for dividends, this amount being credited to employees in proportion to their deposits during the previous year. At the end of 10 years an employee may withdraw the total amount standing to his credit, consisting of his savings, the share of profits contributed by the company, and accumulated interest. If the employee leaves before the expiration of the 10-year period, he may withdraw only his savings plus interest at 5%, compounded semi-annually. In the case of death of an employee, his estate receives the full amount contained in his account, and a woman employee who leaves after 5 years of service to be married, likewise receives full payment. The fund is managed by a board of five trustees, two being employees and three being officers or directors of the company. (See page 1298.)

Information Accessible to Employees.—It is essential that under any plan providing for profit distribution dependent upon earnings complete information be accessible to employees concerning those earnings. It is not perhaps necessary that the books be open to the scrutiny of individual participants in the plan, but a **complete and reliable report** should be available which will assure them that they are receiving the profit distributions to which they are entitled under the terms of the plan in operation.

EFFECTIVENESS OF PROFIT-SHARING PLANS—GENERAL ADVANTAGES AND DISADVANTAGES.—Prof. Ralph E. Heilman, Dean of the School of Commerce, Northwestern University, in an address before the Chicago

Chapter of the National Association of Cost Accountants, speaks of profit-sharing as follows:

"Viewing profit-sharing purely as an efficiency device, its effectiveness is in direct ratio to the rank of the participants, and it is in inverse ratio to the size or the number of the participating group. Let us analyze that statement just a moment. We say that the effectiveness of profit-sharing as an incentive, as a motive, as a stimulus for men, is in direct ratio to the responsibility, to the character of the job the man occupies. The higher the job, and the greater the responsibility, the more effective profit-sharing will be.

"In the first place, it is perfectly evident that in the case of men who are occupying positions of this character, their opportunity to exercise an important influence is very much greater than is that of the man who holds a job in the rank and file. The purchasing agent, by one shrewd purchase in the front office, in half an hour can exercise a more important influence on the year's total production than can a mechanic out in the shop in a year, regardless of how faithful and efficient he may be in the performance of his duties. In other words, the men who occupy the more important positions exercise a more important influence upon profit, and, therefore, it follows, that if you can get any additional incentive for them, it will be more profitable to do so. In the second place, those who occupy the more important responsibilities can see the relationship between their effort and profit very much more easily than the obscure employee down in the rank and file.

"Then, again, for those who occupy these more important positions, profit-sharing is likely to prove much more successful, because they are much more familiar with business vicissitudes, fluctuations and uncertainties than are the employees down in the rank and file. That is a tremendously important consideration, because if you have a profit-sharing scheme which includes all the rank and file, your plan may go along beautifully so long as you are earning good profits, but just as soon as the company strikes a lean year and the profits available for distribution are small or non-existent, antagonism and suspicion are aroused.

"But more important than any of these considerations is the fact that in the case of men occupying the upper positions of more importance, it is more difficult, generally speaking, to find any yard-stick by which you can measure their individual results. How will you find a system for these men occupying the more important positions by which you can definitely distinguish the contribution which that individual has made to the success of the business, or pay him a bonus accordingly? It can be done in some cases. The sales manager may be paid a bonus upon sales, but what yard-stick would you find, for example, for the controller, the auditor, the chief cost accountant, the employment manager, the man in charge of public relations, the publicity man, the advertising department? It simply cannot be done, and in the absence of any such individual yard-stick, and as a supplement to strengthen and reinforce the flat salary arrangement, profit-sharing frequently proves highly effective in motivating and energizing this group upon whose effort so largely depends the success of the business. It is for these reasons that I say profit-sharing is in direct ratio to the rank of the participants.

"I should not be misunderstood as saying that profit-sharing will never work with a large group of employees. It may. It is in operation in some such establishments, but I do maintain that if it is to be applied to the rank and file of wage-earners, it will work very much better in a comparatively small business establishment than it will in a large establishment where thousands of such employees of the rank and file are permitted to participate. Why? What is the

ratio of the effectiveness of profit-sharing as a method for compensation on the size of the participating group? It is this: The greater the number, the larger the number of employees who are to participate in the scheme or plan, the less is the opportunity for the management to educate the employees with regard to the essentials of profit-sharing. If you are going to have a plan of profit-sharing for the rank and file of labor, it will not prove self-operating. Nothing does. That means you must have a constant and continuous campaign for education among all these employees who participate in order to point out to them all the time just how they can affect profits, just what they can do by increased care or economy of exertion to help increase the company's profit for the year. The larger the number of your employees the more difficult that is to do. The more it has to be delegated by the management to certain other employees and subordinates, the less is the direct, immediate, personal contact between the management of the business and the employees of the rank and file, and, therefore the less effective, ordinarily, are the efforts to enthuse the group with regard to profit-sharing.

"This also is true: The larger the number of the rank and file of employees who are participating (other things being equal), the less is the influence which any one of them actually does exert upon profits. If you have a thousand or ten thousand employees, the influence that any one employee in one department can exercise upon the year's profits is relatively negligible. The larger the business, even if he does exert himself, the greater is the possibility that any increased care or saving, economy or efficiency on his part will be offset by the loafing on the job of someone else in some other department in the business whom he has never seen or whom he does not know. You cannot get the same degree of personal enthusiasm out of a group of ten thousand wage-earning employees with regard to a profit-sharing scheme that you can where there are a hundred or two hundred.

"Profit-sharing is in direct ratio to the rank; inverse ratio to the size. I think that this conclusion, theoretical though it may seem to be, is actually borne out and verified by the history of profit-sharing experience, because so far as our investigation carried us, we found, on analysis of the actual experience of American firms and corporations dealing with profit-sharing plans, that in practically all of those companies which had introduced profit-sharing, had experimented with it and later had abandoned it, the schemes were of the type which included the wage earners alone, the rank and file alone, or which included a very large number of the rank and file. We also found that out of those firms which had experimented with profit-sharing among the managerial and executive group, practically none had abandoned it.

"We also found that where profit-sharing had been employed for the rank and file of the employees and where it has had a successful operation over a goodly number of years—and there are some such plants—practically all those plants are relatively small. Some of the best known profit-sharing experiments, where profit-sharing has been in operation for many years among the rank and file, occur in small plants.

"Viewed purely as a method of industrial compensation, profit-sharing has its place in the industrial scheme of things. It is not a universal place; it is not to be recommended under any and all circumstances. It simply takes its place side by side with a good many other systems of industrial compensation, each one of which is to be used under those circumstances which are most designed to secure its success."

The conclusion that profit-sharing has a **real place in industry** under our present economic system would appear to be justified. The realization that it is not a general panacea, a substitute for good management or the wage system, is well presented in the following paragraphs from "Profit-Sharing—Its Principles and Practice," by Burritt, Dennision, Heilman and Kendall:

"While we are confident that proper profit-sharing will accomplish some very important results, there are certain things which profit-sharing does not do. Profit-sharing is not a substitute for good management, nor should it be introduced with the expectation that it alone will transform an unsuccessful and poorly managed business into a highly successful and prosperous one.

"Profit-sharing does not propose to do away with the existing economic order, under which some men must be employers and others employees. Indeed, it rests upon the assumption of the continued existence of that economic system and merely proposes that under certain circumstances the flat wage or salary shall be supplemented by an additional payment representing a share in the profits. Just as the commission system provides that the salesman shall receive payments based upon sales, in addition to salary; just as scientific management provides that the workmen shall receive a bonus payment based upon output, in addition to stipulated wages; so profit-sharing is an arrangement which provides that the participant shall receive a payment based upon profits, in addition to his guaranteed wages or salary. Profit-sharing is not a substitute for the wage system, but it should be recognized as having its rightful place within that system."

BASES OF PARTICIPATION.—Some of the ordinary bases of participation in profit-sharing plans are as follows:

1. Wages
2. Rank
3. Efficiency
4. Length of service
5. Equality

Wages.—The most usual basis of participation in profit-sharing is that of wages. When **employees are not classified,** individual wages are the measure; when there is **group classification** of employees, participation within groups in proportion to the wages of the groups is common.

Rank.—Since the rank of employees may have a very definite bearing on their ability to influence profits, it is often a useful gauge for their participation in profits. Employees to participate may or may not be limited to certain groups.

Efficiency.—Efficiency, as determined by the management, may be the basis for participation in profit-sharing. This method is subject to frequent criticism by employees because it is open to abuse by favoritism on the part of the management.

Length of Service.—Participation in profit-sharing on the basis of length of service is common, being chiefly directed toward the stabilization of labor.

Equality.—Some profit-sharing plans have distributed profits equally among employees, without regard to wages, rank, efficiency, length of service, or any other factor. Where profit-sharing is for the purpose of rewarding individual effort and accomplishment, it is obvious that the objective cannot even be approached through a uniform distribution of profits. Such a distribution may serve as an incentive to the organization, but only in a general way.

BASES OF PROFIT DISTRIBUTION.—

Before Interest or Dividends on Capital.—Some profit-sharing plans now in use provide for a distribution of earnings before deductions for interest or dividends on capital. In this manner employees are assured of a distribution if the company makes even a small profit, though during a period of inadequate profits proprietors may not receive a fair return on their investment. The ordinary share of profits assigned to employees under this method **varies between 5 and 35%**, and in a majority of cases is not over 10%. **One typical plan** installed at a textile mill with several hundred employees provided for an equal distribution of profits between employees and stockholders. Of the stockholders' share, part was paid in dividends and part was devoted to surplus. The employees' share was divided into three parts, one for officials, one for heads of departments and minor officials, and the third to other employees. The first two parts were distributed in cash; the third was devoted to a partial distribution of cash, the balance being set aside in special funds. One of these funds was originally used for the building and maintenance of a clubhouse. Later all funds were merged into a general welfare fund available for the clubhouse, old age pensions, group life insurance, accident insurance, sick benefits, poor and distress relief, free dispensary and medical attendance, educational classes, and other activities. Although the equal distribution of profits provided for appears to be very liberal, the following statement of the company reflects its satisfaction with the plan:

"The profit-sharing feature has unquestionably been a live factor in the development of the business. The stockholders' earnings have steadily increased, and the earnings of the officials from the highest to the lowest, as well as those of department heads and employees generally, have been quite generous, meeting all demands and expectations. We have no recollection of an official or experienced head of a department leaving our employ to engage in a competitive business or to join a competitor. We endeavor to offer opportunities to ambitious, capable men equal to those found in private enterprises or offered by competitors."[1]

After Interest or Dividends on Capital.—Provision for interest or dividends on capital before the determination of distributable profits may be allowed to ensure a minimum fixed investment return from available earnings. If earnings are low, employees may receive no distribution, but in spite of this the provision would appear to be equitable. One plan of this type is in operation by a company manufacturing builders' hardware (Warner Hardware Co.) and maintaining about 1,000 employees. An 8% return is first allowed stockholders on the **capital and surplus** invested in the business, the remaining profits being apportioned 50% to stockholders and 50% to employees. Commissions on sales have been discontinued. A marked increase in efficiency among the employees who understand the plan is reported.

A **clear definition of profits** is essential in any such plan. The capital upon which a fixed investment return is to be computed must be defined, for it may include capital stock only or capital stock and surplus. Surplus may be taken to be earned surplus alone, or may include paid-in surplus or surplus arising from revaluations or appraisals. The treatment of capital gains and losses or unusual charges against operations for the purpose of creating reserves, should be specified. Such attention to detailed definitions is necessary in order to avoid misunderstandings arising through confusions of terms.

[1] National Civic Federation—"Profit Sharing by American Employers" (Wayne Knitting Mills).

Types of Profit-Sharing Plans

As stated previously this section presents a brief summary of the features of various plans used as incentives for employees, and does not confine itself to those plans alone which would meet a rigid definition of profit-sharing. Some plans offer a direct reward based upon individual efforts; others offer some form of distribution dependent primarily upon profits, either of units, departments or branches, or of the business as a whole; still others resemble welfare plans.

BONUS PLANS.—Among profit-sharing or similar plans, the **cash bonus plan** is the most general. Details of payment vary widely, but disbursements are usually regular and to employees represent a comparatively large sum to receive at one time. Although employers do not often attempt to control the expenditure of such a bonus by employees, it has been noted that where **savings bank facilities** have been made convenient, the workers have deposited therein substantial portions of their bonus.

Uniform Wage Bonus.—A bonus based directly upon wages may be paid to employees in addition to the prevailing rate of wages. It should help to ensure and stabilize the labor supply, though some employers feel that this object can be more readily accomplished by the payment of a higher rate of wages.

Graded Bonus.—A bonus, graded with length of service, is likely to promote **continuous service.** One company makes the following bonus gradation:

Term of Employment	Percentage of Salary of Preceding Year
2 years	2 %
3 "	2½
4 "	3
5 "	3½
6 "	4
7 "	4½
8 "	5
9 "	5½
10 " or more	6

Another company grades its bonus as follows:

Term of Employment	Percentage of Salary of Preceding Year
1½ to 2½ years	5 %
2½ to 5 "	10
5 to 10 "	12½
10 years or more	15

Still another graded bonus progresses as follows:

Term of Employment	Percentage of Wage of Preceding Year
1 to 2 years	2%
2 to 3 "	4
3 to 4 "	6
4 to 5 "	8
5 to 6 "	10
6 to 7 "	12
7 to 8 "	14
8 to 9 "	16
9 to 10 "	18
10 years and over	20

Gang Bonus.—Where the results of individual effort cannot be measured but the total amount of work accomplished by a group or gang can be ascertained, a gang bonus system under adequate managerial supervision may be inaugurated. The use of such a system is attended with many difficulties and it rests with the individual case whether direct profit-sharing would be simpler of operation.

Bonus on Production of Sales.—Bonus payments are sometimes based upon production of operating department employees, and may stimulate quantity output or high quality of work. Bonuses based upon sales afford an effective driving force for the sales organization, and are in general well regarded by employers.

Bonus on Savings over Predetermined Standards.—Employees may be paid a bonus on the savings between a predetermined standard or estimate of cost, and actual cost. This is a difficult system to install and operate, for the standard must be carefully and fairly set. If the bonus proves large, the employer may feel that his standard is too high and that he is paying a high price for the additional production which is not a fact; if the bonus proves small the employee may feel that he is being exploited. Frequent changes are not looked upon favorably by employees, particularly if the standard cost is revised downward. Although this system is complicated and difficult to handle, where operated with the utmost care it has proved conducive to the efficient execution of assigned tasks.

Bonus to Executives on Basis of Production.—In some industries where the employees are paid high wages, no further direct incentives are offered, but the executives may receive a bonus. Such bonuses are frequently paid on production in excess of the normal or standard, as determined from the average production of previous years.

Discretionary Payments.—Cash payments to employees are sometimes made by the management at its discretion. One company has for several years declared an annual bonus for all employees varying from 10 to 23% of their yearly wages, and finds the plan satisfactory. Another company has distributed amounts to managers at its will and has paid other employees a bonus based upon wages of 5% for service of less than 1 year and 10% after service of 1 year or more.

WAGE DIVIDEND PLANS.—Under wage dividend plans employees receive a dividend on their annual wages which bears a **definite relation to the dividend paid on capital stock** of the company. In many instances the rate is the same as on the capital stock; in others it may be smaller. Some companies set variable rates, depending upon the employee's length of service. The Edison Electric Illuminating Co. of Brooklyn, for example, pays to employees who have been with the company for 2 years a wage dividend at one-half the rate of dividend payments on its stock. The rate advances at regular intervals until, for employees of 5 years' standing, it is equal to that paid on the capital stock.

In another company with about 3,000 employees and an annual wage roll of around $2,000,000, those employees who render satisfactory and continuous service for 12 months receive a dividend on their year's wages of 8%, the same rate as that paid to stockholders. Any dividends which are forfeited by employees who leave voluntarily, or are discharged, or are excluded from participation on account of unsatisfactory service, are credited to a benefit fund out of which the directors of the company may grant assistance to aged or disabled

employees. The plan provides for participation by all employees, and after 5 years of operation, is regarded by the company as an unqualified success.

To employees the **chief defect** of wage dividend plans is the fact that the dividend is entirely subject to the discretion of the management. Even if earnings are large and employees share at the same rate as stockholders, the directors may withhold from distribution a large part of profits, and the portion accruing to employees may be small.

STOCK OWNERSHIP PLANS—DISTRIBUTION OF STOCK AS SHARE OF PROFITS.—Profit-sharing may take the form of a distribution to employees of capital stock of the company. Certificates may be **currently distributed outright,** though this method has the disadvantage of compelling the issue of a large number of fractional shares, stock may be **paid for partly by the employee and partly from his share of bonus or profit distributions,** or **profits may be credited to employees** for application against the purchase price of stock, the stock to be delivered when those accumulated profits equal the purchase price decided upon.

A stock ownership plan of the latter type has been in operation for many years in one manufacturing company, the employees now owning about one-third of the entire capital stock. After the payment of 6% dividends to stockholders, the remaining profits are divided equally between stockholders and employees, all of whom participate, from the president down. The employees' share is divided proportionately according to annual wages or salaries among those who have been with the company for 6 months or more, and credited to their stock subscription accounts. When accumulated credits are sufficiently large, fully paid stock is issued to employees. The stock, however, is issued in any case only after 3 years, and is non-transferable while the employee remains with the company, although in unusual cases where individual circumstances warranted, the company has purchased it from employees who were in need of cash. Any employee who leaves the company before the expiration of the 3-year participation period forfeits his accumulated profits. The above plan has proved satisfactory to the company and its 1,000 employees; there has been no labor trouble and it appears that the effectiveness and earning power of the company has increased.

A somewhat similar plan was in use for several years in a **public utility corporation** with about 550 employees. All employees except officers who had been with the company for a year were eligible, and were credited each quarter at the annual rate of 8% on the wages earned by them during the preceding three months. The annual rate of dividends paid to stockholders was also 8%. When the accumulated credits of an employee were equal to the market value of one or more shares of the company's stock, a stock certificate was delivered to him, with no restrictions as to its use. If the employee desired to withdraw cash instead of stock, he received only one-half of the amount credited to him. In the case of employees discharged for drunkenness, insubordination, crime or destruction of property, credits were forfeited. If discharged for other reasons, employees received full credits, as did women who left to marry. Other employees leaving of their own accord received one-half of their total credits. The company reserved the right to refuse participation in the plan to any employee who lacked interest in the company's welfare, and to cancel upon one week's notice any agreement in force. The plan was discontinued after several years, because it was decided that the higher wages and shorter hours then existing offered sufficient remuneration and inducement to the employees.

DISTRIBUTION OF CASH AND STOCK AS SHARE OF PROFITS.—Sometimes a distribution to employees of part cash and part stock is made, **the proportions varying** with different groups of employees. In general, the smaller the wages the greater is the proportion of cash paid under such a plan. Sometimes the company retains the right to determine how payments shall be made, whether in stock or in cash, and in what proportions. This method enables it to govern its distribution by the requirements of its cash position, though employees usually prefer to know definitely what distribution they may expect. Employees are allowed at times the option of taking their share of the distribution in stock or in cash on some predetermined basis. The New Haven Gas Light Co. permits its employees to take either stock for the full amount or cash for one-half the amount credited to them. Such a plan may prove disturbing to the company in working out its financial plans, since it cannot know in advance how great a proportion of its cash resources will be required for distribution either in ordinary times or in periods of financial stress.

SALE OF STOCK TO EMPLOYEES ON INSTALMENT PAYMENTS.—Perhaps the **most common form** of stock ownership by employees arises through the sale to them of stock which may be paid for in instalments. Often the price to them is below the market value of the stock. One clothing manufacturing company with about 200 employees allowed them to subscribe at $80 a share to capital stock of $100 par value, paying dividends at the rate of 7% annually. Ten per cent of the purchase price was required to be paid annually, either at one time or in weekly payments at the option of the employee. Under a somewhat different plan, a Chicago bank offered to its employees who were members of the bank pension fund the privilege of purchasing shares of its capital stock at $10 less than the market price. The employees were allowed to borrow the necessary funds from the bank and repay them in instalments of $5 a month for each share, interest being charged on unpaid balances at the rate of 4% per annum.

TYPES OF STOCK DISTRIBUTED.—**Preferred stock** is not often distributed to employees under profit-sharing plans, for its dividend is stable and does not reflect ordinary fluctuations in earnings. **Common stock** is frequently distributed, though its speculative character may make it unsuitable for employees. The most desirable type of stock for issue under a profit-sharing plan is a **special issue** adapted to the requirements of the plan. Such stock may be non-transferable, it may be in small denominations for convenient distribution of fully paid shares, or it may carry special privileges, such as representation on the board of directors. The amount of the issue would readily show the capitalization of the company arising from its profit sharing plan.

RESTRICTIONS ON STOCK HOLDINGS OF EMPLOYEES.—Some form of restriction is usually placed on stock held by employees. Generally the amount is limited according to the wages, salary or length of service of the participants. The Procter & Gamble Co., Cincinnati, limits the stock holdings of an employee, under its plan, to the amount of his annual salary, with 25% additional for each 5 years of continuous service. It is desirable that employees hold their stock as long as they remain with the company, and it is usually necessary to make provision for this in the stock ownership plan. Some plans provide for stock that is non-transferable while the employee remains; others deprive employees who dispose of their stock of their rights to participate in the future profits of the company; others pay a special bonus to employees who retain their stock.

A plan, placed in operation by a company with several thousand employees is outlined below. The executives, including factory and store managers, were allowed to purchase common stock in amounts proportionate to their salaries, and to pay for it in equal monthly instalments extending over 20 years. Interest at 5% was charged on the unpaid balance, and all dividends declared were credited to the account of the subscriber. An additional amount was credited or paid in cash if subscriptions were fully paid, of $1 per share for each $30,000 of net profit of the company remaining after dividends, sinking fund, depreciation, income taxes and similar requirements had been met. It is interesting to note that the employees' subscriptions were nearly all paid up in 3 years, instead of the 20-year period allowed under the plan.

ADVANTAGES AND DISADVANTAGES OF STOCK OWNERSHIP BY EMPLOYEES.—Ownership of stock in a company by its employees is desirable since it **stimulates the immediate efficiency** of the organization and makes for its permanence. The employee who sees in his stock tangible reflection of the profits or losses of the business cannot be disinterested. The danger of his developing a **speculative interest** in the purchase and sale of the company's stock can be guarded against by the issue of non-transferable stock, or by other restrictive measures outlined in preceding paragraphs. The **chief disadvantage** to the company of stock ownership by employees is the possibility of capital expansion which may perhaps become unwieldy. But this should not be difficult to adjust under a sound financial management.

OTHER MISCELLANEOUS PLANS—BENEFIT FUNDS.—Promotion of the welfare of employees is sometimes undertaken through the establishment of benefit funds. These funds are available for payment of benefits in case of accident, sickness or unemployment, and to provide insurance or old age pensions. They tend to encourage length of service among employees, when wages and working conditions are satisfactory according to the standards set by similar businesses. Since participation in their benefits appears remote to most employees, they **do not offer an incentive** to increased efficiency.

RELIEF FOR FAMILIES OF EMPLOYEES.—Plans providing relief for families of deceased employees are generally part of a comprehensive welfare system. Such relief plans often provide **insurance** for employees who are with the company over a specified number of years, and who die while in its service. The widow receives, during widowhood, a monthly payment bearing a definite percentage ratio to the salary of the employee, with additional compensation for each dependent child. One relief plan installed in a manufacturing company having about 2,000 employees arranged that in case of the death of an employee who had been with the company for more than 2 years, the widow should receive each month 30% of the employee's monthly wage, with an additional 10% for each child under 16 years of age, the total amount being limited to 60% of the employee's monthly wage or salary, or in any case $60. Payments continued during the life of the widow, except in cases of remarriage, when they ceased two years thereafter.

EMPLOYEES' PROFIT-SHARING SAVINGS FUND.—Profits may be shared through the establishment of a savings fund for employees. One company contributes annually 5% of its net profits to an employees' profit-sharing and savings fund, in which all employees who have been with the company for 3 years or more are eligible to participate on the basis of their contributions; the contributions are limited to 5% of each employee's annual salary. Another company has established a savings and profit-sharing plan in which several thousand of its employees participate. All employees, after 3 years of

service, are eligible, and each may deposit annually not more than 5% of his wages, the limit for any one year being $150. The company contributes 5% of its profits. The fund is handled and invested under the direction of a board of five trustees selected by the directors of the company, three being officers or directors and two being employees.

It sometimes happens that **combination plans** are devised, such as one adopted by a large automobile manufacturing company. The plan provides that 10% of net profits after the allowance of 6% on capital invested be distributed annually among deserving employees on account of specially valuable services. There is, in addition, a savings and investment fund in which about 18,000 employees, 32% of the total, participate. Each employee is permitted to deposit periodically $5, or multiples thereof, up to 10% of his annual wage, but not exceeding $300 a year. The company administers the fund, contributes an amount equal to the employee's savings, and pays interest at 6% per annum, compounded semi-annually, on the total. A new class starts each year, to terminate in 5 years. As each class matures the beneficiary may elect to take cash, withdraw securities in which the funds have been invested, or leave the money to continue at interest.

LIFE INSURANCE.—A life insurance plan provides that certain employees who have been with a company over a definite period of time, receive a life insurance policy, the **annual premium** on which is **paid by the company.** Details of such plans vary. One company presents to each employee of three months' standing a policy for $1,000. Another company pays bonuses to department heads and assistants, and pays the premiums on insurance policies for all other employees, the amount of insurance depending on length of service. After 1 year the amount is $250, after 3 years $500, and after 5 years $1,000.

ATTENDANCE REWARDS.—Attendance rewards are sometimes given for regularity in attendance, the sole purpose of such a plan being to ensure full time attendance of employees for a given period, generally **over the peak of production.** Payments are usually based on regular wages. One company pays a bonus of 4% for regularity of attendance during a pay term, and an additional 12% for regularity during a period of 6 months. Another company, engaged in the manufacture of candy, during the last several months of each year offers bonus payments for full attendance amounting to 5% for one week, an additional 5% for 4 weeks, and a third 5% for a period of several months. Still another company offers to employees who are not absent during a period of 3 months a bonus of 10% of the wages earned during the period.

LOANS AT LOW RATES.—Cash loans at low rates to employees are frequent particularly in small companies where employers are in close touch with the workers. Credit unions or somewhat similar organizations are often used to furnish the nesessary media through which loans may be placed. Such loans may be for the purchase of homes, to cover the expense of illness, or for various other purposes, and are usually to be **repaid in scheduled instalments.** In helping to prevent employees from falling into the hands of loan sharks, they perform a very useful service, and while greatly removed from profit-sharing, they nevertheless have proved effective in maintaining the goodwill of employees and insuring continuity of service.

DISCOUNTS ON PURCHASES.—It is quite usual for employees to be allowed a special discount on purchases made through the company. The discount may be limited to the ordinary product or merchandise of the company, or as in many cases it may extend to clothing, foodstuffs and other commodities

carried in a general company store for the benefit of employees and sold to them at cost.

GIFTS AND PRIZES.—Some companies present their employees with turkeys at Thanksgiving or Christmas; others give at Christmas a gold piece or a week's wages. These distributions are, of course, in the nature of **gratuities**, and are recognized as such by employees. A percentage of profits is sometimes set aside for distribution among employees in the form of **prizes** as a reward for promptness, attendance, efficiency, courtesy or some other desirable quality. Distributions are made directly, or through an employees' mutual benefit society.

FREE TRANSPORTATION AND LUNCHES.—Many companies furnish to employees **free transportation** to and from the plant or office, either in special busses or by making allowances for railroad commutation tickets, trolley fares or other transportation expense. Employers, particularly banks and trust companies, sometimes **furnish lunch** to employees, either gratuitously or at a nominal cost. The lunch period is generally curtailed and prompt attendance of employees is required. Concessions, such as free lunches or transportation, are usually considered by employees as incidental to their employment and part of their wages.

PENSION SYSTEMS.—Pension systems are often installed to provide for the retirement of employees with a yearly pension after long service. The provisions of such systems vary widely. Retirement generally becomes effective after 25 years of continuous service, and the annual pension may be approximately 50% of the employees' salary during the last year of service.

Examples of Profit-Sharing Plans

Several representative profit-sharing plans now in successful operation are presented in the following pages.

DENNISON MANUFACTURING CO.—The Dennison Manufacturing Co. plan in the form of an "Industrial Partnership" is of exceptional interest and merits careful study. Excerpts from the literature of the company together with the plan are given below.

"Technically, the Dennison Manufacturing Co. has all the attributes of a corporation.

"Actually, the Dennison Manufacturing Co. is not a normal financial corporation but more truly an industrial partnership. In so far as its corporate fund is the property of investors, it is represented by preferred stock which gives to its owners a fixed return in the nature of interest and compensation for risk. This stock, however, carries with it no right to share either in the net profits or in the control of the corporation. The investors are in the position of lenders and are not a part of the body corporate.

"The control of the Dennison Manufacturing Co. is vested in its employees—chiefly in its managerial employees who hold the voting stock of the company. Employees whose positions are not of a managerial nature also have a voice in the government of the company through participation in the Works Committee.

"All employees share in the company's profits roughly according to their participation in management. Each year, after dividends on all outstanding stock have been paid, the net profits are re-invested in the business, and against this increase of capital new shares of Industrial Partnership stock are issued. Two-thirds of this stock is voting stock and is distributed to the Managerial Industrial Partners in proportion to their relative salaries. One-third is non-voting

stock and is issued to the Employee Industrial Partners in proportion to their length of service. In each case a minimum term of service is required in order that the employee may become thoroughly identified with the company before sharing in its management or profits.

"Thus the company is very similar in organization to a "limited partnership" of nearly two thousand members. For although the corporate entity is strictly an invested fund, the body corporate is not a group of investors but the active workers of the company. . . .

"The company was entirely reorganized in 1911. All the common stock previously held by the investors was changed over to non-voting first preferred stock with a fixed annual return of 8%. All remaining profits are annually re-invested in the business, and stock certificates covering this investment are issued to managerial employees. This stock, which is called Managerial Industrial Partnership Stock, gives to its owner the privilege of voting for the Directors of the company and the right to an annual cash dividend. The exact amount of this cash dividend is determined each year by the Directors on the basis of business conditions.

"The Managerial Industrial Partnership Stock is distributed each year to the managerial employees in proportion to their salaries. Managerial employees are sales managers, senior salesmen, department heads, principal foremen, chief clerks, and others whose work requires similar managing ability or whose work shows a high degree of imagination, tact, or business judgment. This stock is not transferable, but when a Managerial Industrial Partner dies or leaves the company, his Partnership Stock is cancelled and 7% second preferred stock of equal par value is given in place of it.

"By this change the investors who were not actively engaged in the business received a fixed dividend and had no power to vote, while the remaining profits and control of the company were given to the people who were in a position most to influence those profits, and at the same time whose positions in the company enabled them to understand the broader problems with which the company had to deal.

"After the reorganization it became evident that the company would be better managed if those employees who were not in managerial positions were also given a proper opportunity to strengthen its policies by their suggestions on matters relating to their own work. On this account, the management put before the employees in 1919, the desire of the company to have them work out some plan for their participation in management. The employees worked out a plan, which was so thorough and well-balanced that the management immediately approved it.

"The plan provided that the employees of each large department or group of small departments, should elect representatives to a General Works Committee. This committee meets semi-monthly to consider problems relating to the welfare of the factory and to make recommendations to the management. When the Works Committee has reached its conclusion on any point, its decision is referred to one of the several small conference committees consisting of an equal number of members from the management and the employees. Matters that start from the management, may either be similarly referred first to one of these conference committees or may go directly to the Works Committee. The conference committee carefully goes over the proposition and makes any changes that seem advisable from the joint point of view of the management and the employees, and their recommendations are passed on to the management and the Works Committee for final approval.

"Through the Works Committee the employees took an active and vital part in the management of the business. After the employees had assumed this direct share in management, they felt that they could earn the right to share to some extent with the Managerial Industrial Partners in the profits of the business. The management felt also that the stimulus to extra effort which comes from the sharing of profits by all employees might be of benefit to the company as well as a means of increasing the earnings of the employees and that the sense of sharing directly in the fruits of successful management would also be a wise safeguard of the participation of the employees in management, exactly as it was a wise safeguard of the powers of control exercised by the managerial employees.

"The Works Committee on this basis worked out a plan which they asked the management to accept on trial with the understanding that it would be made permanent if experience shows that the employees earn that share in the profits which the plan provides they shall receive. This plan provides an annual distribution, among the employees who do not participate in profits as Managerial Industrial Partners, of one-third of those profits of the company available for distribution after preferred stock dividends have been paid. The employees who receive this distribution are called Employee Industrial Partners and must have been two years in the employ of the company at the beginning of the year in which the profits to be distributed were earned. Exactly as with Managerial Industrial Partners, these profits are reinvested in the business. Employee Industrial Partnership Stock is then issued equal in par value to money thus invested. The relative amount of stock which each Employee Industrial Partner receives depends upon his length of service. The stock is like Managerial Industrial Partnership Stock in that it is non-transferable, and is cancelled and changed into second preferred stock when the employee leaves the company or dies. It is paid the same dividend as the Managerial Stock. Employee Stock, however, does not carry the right to vote because the employees already share in the internal management of the company through the Works Committee, and because their work does not give them experience which would enable them to exercise sound judgment on matters relating to outside financial and commercial policies.

"This last step in the development of the organization of the Dennison Manufacturing Company makes the company a true industrial partnership. The ultimate control of the policies of the company is in the hands of all managerial employees, while an important share of the internal management of the company is in the hands of the employees who are not doing work of a managerial nature. Investors in the company do not share in the management, and are given a fixed rate of interest in place of a share in the profits. Two-thirds of the net profits of the company are distributed in proportion to their salaries among the managerial employees because they are the most influential in the creation of profits; and the other third is distributed in proportion to their length of service among those of the remaining employees who have been long enough with the company to become thoroughly a part of it. Each person who has become a Dennison employee is thus a true partner in the business, sharing in the ownership of its capital and with a share in its profits and in its management proportionate to the influence which his position gives him on the earning of profits and the experience which his job gives him in solving the problems of management."

THE DENNISON EMPLOYEE INDUSTRIAL PARTNERSHIP PLAN

Before March 15 of each year, the Board of Directors shall set aside as the Employee Industrial Partnership Fund, one-third of the total fund to be distributed as extra remuneration in stock in that year.

Under this provision the employees will have for their share one-half of the sum which the Managerial Industrial Partners will receive. Every employee, therefore, can feel certain that in every year in which there are any profits available for such distribution, a one-third share of these profits will be distributed among the employees. The amount of profits which the employees will get will thus depend upon the amount of profits earned and this in turn will depend upon the mutual efforts and co-operation of the employees and the management.

DENNISON EMPLOYEE INDUSTRIAL PARTNERS

Every employee of the Dennison Manufacturing Company and its subsidiary companies, who on the first day of any year has completed two years of **continuous** full-time service with the company, is eighteen years of age or over, and is not participating in the profits of that year upon some other basis, shall become an Employee Industrial Partner, and shall be notified thereof before February 1st of that year.

If any Employee Industrial Partner resigns or is discharged from the employ of the company, his rights as an Employee Industrial Partner shall immediately be suspended. If he subsequently returns to the employ of the company his rights as an Employee Industrial Partner shall be restored as soon as he has completed on the first day of any year since his return, one year of **continuous** full-time service with the company.

BASIS OF DISTRIBUTION OF THE EMPLOYEE INDUSTRIAL PARTNERSHIP FUND

The Employee Industrial Partnership Fund of any year shall by March 15 of the following year, be distributed among the employees who were Employee Industrial Partners on January 1 of the year for which distribution is made. All such Employee Industrial Partners shall be classified into six groups on the basis of length of **accumulated** full-time service as indicated in the following table. The individual members of each group who have worked the full year shall each receive a uniform sum which shall bear the ratios to the sums received by the individual members of each of the other groups that are also indicated in the following table.

Group	Term of Full-time Service on Jan. 1 of the year for which distribution is made	Index numbers or "points" indicating relative amounts received by the individual members of each of the several groups
1	Less than 5 years	10 points
2	5 years to 10 years	12 "
3	10 " " 15 "	15 "
4	15 " " 20 "	18 "
5	20 " " 25 "	21 "
6	25 " and over	24 "

No Employee Industrial Partner shall participate in the distribution of any year whose full time service or whose full time service and sick leave in that year do not amount to at least six months. If he is entitled to share but has worked less than one year, he shall receive a share proportionate to the number of full months actually worked.

Any Employee Industrial Partner who leaves the employ of the company after six months service, but before the end of the year, shall be given a certificate indicating the number of months of service for which he is entitled to share, and his share shall be sent to him at his last known address.

COMPUTATION OF LENGTH OF SERVICE

Length of full-time service shall be computed as follows:

1. Vacations and other absences not exceeding the rate of 24 working days in one year,

holidays, lay-offs of one week or less in duration if caused by unemployment, and absences of less than one working day shall not be deducted from length of service, but all other absences from work shall be deducted.*

2. The service of home workers and such other employees as do not normally work the full standard hours of their particular class of work shall not be counted.

3. Time shall be computed in full months only (and for this purpose a month shall be considered as having 25 working days), and any fraction of a month remaining at the end of a year shall be disregarded.

4. Only absences which constitute resignation or discharge shall be considered as interrupting **continuous** service.

5. In computing **accumulated** service, the service of any Employee Industrial Partner prior to the day on which he became an Employee Industrial Partner shall be counted as two years and no more, except as provided in paragraph 6 of this section; and the service of an Employee Industrial Partner whose rights have been suspended, between the date of suspension and the day on which his rights as an Employee Industrial Partner were restored, shall be counted as one year and no more.

6. In determining length of service in years prior to 1920 the lengths of service used for the purpose of distributing the 75th Anniversary Fund shall be employed and shall not be subject to amendment. Service prior to 1920 shall always be included in computing **accumulated** service, but shall not be included in computing the two years of **continuous** service necessary for a person who was not in the employ of the company on January 1, 1920, to qualify as an Employee Industrial Partner.

FORM OF DISTRIBUTION OF EMPLOYEE INDUSTRIAL PARTNERSHIP FUND

The Employee Industrial Partnership Fund shall be distributed in the form of non-transferable, non-voting stock, to be known as Dennison Employee Industrial Partnership Stock. This stock shall be issued at par in shares of $10 par value. It shall pay dividends annually at the same rate that dividends are paid on Managerial Industrial Partnership stock during the same year.

In so far as possible the share of each employee shall be distributed in certificates of Employee Industrial Partnership Stock, but such amounts (less than $10) as may remain shall be distributed in cash. Each Employee Industrial Partner at the time of first receiving a certificate shall sign a contract for special remuneration in which he shall indicate the beneficiary to whom the benefits accruing to his stock shall be paid in case of his death, and may also designate a second and third alternate beneficiary. The beneficiaries, however, may be changed by the employee at any time by notice in writing to the company.

Each former Managerial Industrial Partner who has ceased to participate in profits on that basis and has become an Employee Industrial Partner shall at the time of making this change be given the option of having his Managerial Industrial Partnership Stock exchanged for Second Preferred Stock or for Employees' Industrial Partnership Stock of equal par value.

TERMINATION OF EMPLOYMENT

Whenever a holder of the Dennison Employee Industrial Partnership Stock resigns or is discharged from the employ of the company (whether he receives a pension or otherwise) or dies, his right to dividends upon this stock shall cease, and he or his beneficiary shall return the stock to the company. In return the company shall issue to him or in case of his death directly to the first of the beneficiaries that he has designated who is living at the time of his death (and not to his estate unless no beneficiary is named or living), one share of Second Preferred Stock for every 10 shares of Employee Industrial Partnership Stock which he returned or to which he was entitled, and shall pay in cash at par for any additional shares of Employee Industrial Partnership Stock (less than 10) then remaining.

COMMITTEE ON OPERATION

The Chairman of the General Works Committee and the Chairman of the Central Committee, ex-officio, shall be a Committee on Operation for the Employee Industrial

* The regular Saturday morning working period is considered as a full working day.

Partnership Plan. It shall be the duty of this committee to investigate the operation of this plan for the purpose of determining whether it is being carried out in every particular, and to report annually to the General Works Committee concerning its operation. To this end, the Committee shall at all times have power to inspect the books and records of the company.

It shall also be the duty of this committee to prepare according to the provisions of this plan the list of Dennison Employee Industrial Partners for each year, designating the group to which each employee belongs. In case any employee is not satisfied with his position in this list or feels that he is unjustly excluded, he may take his case up directly with the Committee on Operation, which shall reconsider his case. For the purpose of such reconsideration, but for no other purpose, the President of the Company, shall, ex-officio, be a member of the Committee on Operation. The decision of this committee upon any such reconsidered case shall be final and not subject to alteration by the General Works Committee or the management.

DISTRIBUTION AND WAGES

The funds distributed are an award of extra efforts, saving of waste, and whole-hearted co-operation, and are entirely distinct from and in addition to regular wages, and the fact that funds are so distributed among the employees shall not be considered in determining regular wage rates.

SEARS, ROEBUCK AND CO.—The Sears, Roebuck and Co.'s plan for an Employes' Savings and Profit-sharing Pension Fund follows.

SEARS, ROEBUCK AND CO.'S EMPLOYES' SAVINGS AND PROFIT SHARING PENSION FUND

ARTICLE I—PURPOSE

In order that employes may share in the profits of this business, and to encourage the habit of saving, the Company has decided to contribute annually to the fund known as Sears, Roebuck and Co.'s Employes' Savings and Profit Sharing Pension Fund, a sum equal to one-third (1/3) of the remainder of its net earnings for the year, after deducting from its net earnings for such year all dividends payable during such year on its outstanding preferred stock, and a sum equal to ten (10%) per cent of the aggregate par value of its outstanding common stock, but before deducting Federal income taxes, provided, however, that the minimum amount to be contributed by the Company shall be equal to seven (7%) per cent of its net earnings for such year, without deductions for any dividends or for Federal income taxes, as shown by the annual audit of its books.

It is intended that this plan will furnish to those who remain in the employ of the Company until they reach the age when they retire from active service, a sum sufficient to provide for them thereafter, and that even those who achieve a long service record, but who may not remain with the Company all of their business life, will have accumulated a substantial sum. This Savings and Profit Sharing Pension Fund will enable an employe to secure an income for himself after the close of his active business career or, in case of his death, for his family.

ARTICLE II—ELIGIBILITY

Participation will be entirely voluntary.

Only employes who are on the payroll of the Company's Chicago, Philadelphia, Dallas or Seattle stores, or New York office, shall be eligible to participate in this fund, and every such employe who has completed one year of service, shall be eligible to participate in this fund so long as he remains such employe.

ARTICLE III—CONTRIBUTIONS TO THE FUND

An employe in order to participate must deposit in the fund five per cent of his salary. The Company will contribute a sum equal to one-third (1/3) of the remainder of its net earnings for the year, after deducting from its net earnings for such year all dividends payable during such year on its outstanding preferred stock, and a sum equal to ten (10%) per cent of the aggregate par value of its outstanding common stock, but before deducting

Federal income taxes, provided, however, that the minimum amount to be contributed by the Company shall be equal to seven (7%) per cent of its net earnings for such year, without deductions for any dividends or for Federal income taxes, as shown by the annual audit of its books.

Article IV—PARTICIPATION IN THE PROFITS

The contributions of the Company will be made annually as soon after the first of each year as an audit of the books will permit. For the purpose of participation by the depositors in the contributions of the Company, the depositors will be deemed to be divided into three groups as follows: Group A—Consisting of depositors who have been in the service of the Company for less than five years; Group B—Consisting of depositors who have been in the service of the Company for five years and less than ten years; and, Group C—Consisting of depositors who have been in the service of the Company for ten years or more. The contributions of the Company when made will be credited pro rata to the depositors respectively, based upon their respective deposits during the preceding year, except, that the participation of depositors in Group B shall be based upon one and one-half times their respective deposits during the preceding year, and that the participation of depositors in Group C shall be based on twice their respective deposits during the preceding year.

Article V—WITHDRAWALS

Sec. 1. A depositor who has completed ten years of service will be entitled to withdraw all money and securities credited to his account, including the Company's contributions, as hereinafter provided.

Sec. 2. A depositor who has not completed ten years of service will be entitled to withdraw only the amount he has deposited in cash, plus interest at five per cent per annum, compounded semi-annually, and no more; except in the case of a woman depositor who, after five years' service, leaves to become married, in which case she will be entitled to her full share in the fund, in money and securities credited to her account, including the portion contributed by the Company; and except in the case of the death of a depositor while in the service of the Company, in which case his estate, or such beneficiaries as he may designate, will be entitled to the full amount credited, in money and securities, including the contributions of the Company, as hereinafter provided; and except that whenever a depositor is dismissed from service by the Company before completing ten years of service, and the Company by one of its officers shall certify in writing to the Board of Trustees that such dismissal was not by reason of any unsatisfactory conduct on the part of such depositor, then such depositor will be entitled to his full share of the Fund in money and securities credited to his account, including the portion contributed by the Company.

Sec. 3. A depositor shall withdraw upon ceasing to be an employe of the Company, or upon failing to regularly make his deposit.

Sec. 4. A depositor who once withdraws cannot re-enter the fund.

Sec. 5. In any case of withdrawal where a depositor is entitled to share in the contributions of the Company, he will receive either (a) the full amount to his credit, as shown by the accounting for the preceding year, plus interest at the rate of five per cent per annum and plus such sums as the depositor may have deposited since December 31st of the preceding year, with interest at five per cent per annum, or (b) his full pro rata share of the securities and uninvested moneys of the fund, at the option of the Trustees.

Sec. 6. Loans will be made to depositors in cases of actual necessity and when in the opinion of the Trustees the circumstances warrant it.

Sec. 7. Any employe who has been a depositor for ten (10) full years may, if he desires, withdraw in cash, such sum or sums from time to time as shall not in the aggregate exceed one-half (½) of his share of the contributions of the Company made for the year or years subsequent to the time that he shall have been a depositor for ten (10) full years.

Sec. 8. Sears, Roebuck and Company, at the termination of the year 1923, discontinued the giving of so-called "anniversary checks." Everyone who would have received an anniversary check in the year 1924 is given the privilege (until he shall have been a depositor for ten (10) full years) to withdraw in cash from his share of the Company's contribution a sum equal to the amount of the anniversary check which he would have received in the year 1924.

ARTICLE VI—MANAGEMENT

Sec. 1. The fund will be handled, entrusted, and invested under the direction of a Board of five Trustees, to be selected by the Board of Directors of the Company, three to be officers or directors and two employes (not officers or directors) of Sears, Roebuck and Co.

Sec. 2. It is intended that so far as practicable and advisable the fund will be invested in shares of stock of Sears, Roebuck and Co., to the end that the depositors may, in the largest measure possible, share in the earnings of the Company.

Sec. 3. The Board of Trustees may from time to time, adopt rules to carry out the purposes of this plan, and may adopt amendments to the plan; but no change shall be made in the plan as above outlined unless the same is ratified by the vote of a majority of the depositors. All questions of interpretation of this plan, or amendments thereto, or the rules pertaining thereto, or relating to any matter of accounting, values, profits, or any other matters or differences which may arise shall be determined solely by the Board of Trustees, and the decision of the Board shall be final and conclusive upon all concerned.

ARTICLE VII—DISCONTINUANCE

The fund may be discontinued at any time by announcement of the Company made at least six months before its final yearly contribution. After such announcement no new depositors will be eligible to join, and upon the payment into the fund of such final contribution, the fund shall be distributed among all the depositors pro rata in proportion to their interests as ascertained by the Board of Trustees.

UNITED STATES STEEL CORPORATION.—The offer of stock on January 4, 1923, to employees of the United States Steel Corporation is reprinted below.

UNITED STATES STEEL CORPORATION

TO THE OFFICERS AND EMPLOYES OF THE UNITED STATES STEEL CORPORATION AND OF ITS SUBSIDIARY COMPANIES:

The Corporation again offers to those now actually in the employ of the Corporation, or any of its subsidiaries, the opportunity to subscribe for shares of its Common stock, not exceeding an aggregate total of 60,000 shares, under the following terms and conditions:

First—All subscriptions shall be made upon the express condition and agreement that all questions concerning the said subscriptions, and the allotments and interests thereunder, shall be decided by the Finance Committee of the United States Steel Corporation in its discretion and such decision shall be final and conclusive upon all parties.

Second—Subscriptions will not be received from employes under lawful age unless through a lawfully constituted guardian and in that case all subsequent dealings will be with the guardian until the subscriber arrives at lawful age.

Third—Subscriptions shall be for one or more shares of Common stock at the subscription price, $107.00 per share.

Fourth—The following table shows the maximum number of shares which may be subscribed for by employes whose salaries or wages are within the respective limits stated, but employes at their option may subscribe for less than such maximum number of shares.

SUBSCRIPTIONS TO COMMON STOCK

Employes Receiving Annual Salaries of:		May subscribe for a Maximum Number of:
$ 1,070.00 or less		1 share
1,070.01 to $ 1,783.33		2 shares
1,783.34 "	2,496.66	3 "
2,496.67 "	4,012.50	4 "
4,012.51 "	4,904.16	5 "
4,904.17 "	6,955.00	6 "
6,955.01 "	8,025.00	7 "
8,025.01 "	9,095.00	8 "
9,095.01 "	12,706.25	9 "
12,706.26 "	14,043.75	10 "

$14,043.76	to	$15,381.25	11 shares
15,381.26	"	16,718.75	12 "
16,718.76	"	18,056.25	13 "
18,056.26	"	19,393.75	14 "
19,393.76	"	33,170.00	15 "
33,170.01	"	35,310.00	16 "

PAYMENT FOR STOCK

Fifth—Payment of subscriptions shall be in monthly installments to be deducted from the salary or wages of the subscriber. The first deduction will be made from March salary or wages. No installment shall be less than $2.00 per share and shall not exceed one-quarter of any one month's salary or wages. Installments exceeding the minimum must be in even dollars. Payment for the stock should be completed within three years. Interest at 5% per annum will be charged on deferred payments.

DIVIDEND

Sixth—Until payment of the subscription has been completed, any dividends paid on the stock subscribed for will be credited to the account of the subscriber as part of his payment. After the stock is issued to the subscriber future dividends will go direct to him.

CANCELLATIONS—REFUND OF INSTALLMENTS

Seventh—Subscriptions will be cancelled for the following reasons:

(1) By request of subscriber;
(2) By (a) voluntarily leaving the service, or (b) being discharged for cause, or (c) failing to resume employment when requested. (See Section Twelfth.)
(3) By discontinuing payments without the consent of the Corporation for three consecutive months.

The cancellation of a subscription forfeits all interest and benefits which the subscriber would have received if he had continued such subscription. There will then be returned to him the full amount of payments made on the subscription so cancelled with interest at 5% per annum, no credit being given him for dividends or for the special allowance referred to in third paragraph of Section Eighth, and no interest being charged on deferred payments. A subscription may not be cancelled in part, but any open account may be cancelled and payments continue on any remaining open accounts. Payments on any one subscription cannot be deferred in favor of others, without cancelling the former. Minimum payments must be made on all open accounts to avoid cancellation, except as otherwise provided.

SPECIAL BENEFITS

Eighth—When the stock is fully paid for, it will be issued in the name of the subscriber. He may sell his certificate, but as an inducement for him to keep it while he remains in the service, the following offer is made, viz.:

If he will keep the stock and in January of each year, for five years, commencing with January, 1924, will exhibit the certificate to the Treasurer of his company, together with a statement from a proper official that he has been continuously in the employ of the Corporation or of one or another of its subsidiary companies since the date of his subscription for the stock and during the preceding year, and has shown a proper interest in its welfare and progress, he will for each of such five years receive a cash payment at the rate of $5.00 a share for each share of Common stock.

Subscribers who may not have fully paid their subscriptions by January in any year, will, if their subscriptions are still in force, and they have otherwise fulfilled all the conditions of continuous and faithful service as provided, be credited in their subscription accounts with the foregoing special allowance of $5.00 per share on their subscriptions for Common stock.

ADDITIONAL COMPENSATION

Ninth—If a subscriber keeps his certificate and remains continuously in the service for five years, the Corporation intends that he shall then receive a still further compensation.

which cannot now be ascertained or stated, but which will be derived from the following sources, viz.:

The special allowances referred to in Section Eighth, which, after a subscription is fully paid, are forfeited by:

(a) Transfer of certificate from name of a subscriber, whether intentionally or otherwise;

(b) Voluntarily leaving the service, or being discharged for cause, or failing to resume employment when requested (see Section Twelfth)

will be paid by the Corporation into a special fund at the end of each year. This fund will be credited with interest at 5% per annum and at the end of the five years' period the total amount thus accumulated will be divided into as many parts as shall be equal to the number of shares of Common stock subscribed for hereunder and then remaining in the hands of subscribers who shall have continued in such employ for the whole five years. The Corporation will then by its own final determination in its discretion award to each subscriber whom it shall find deserving thereof as many parts of such accumulated fund as he shall be entitled to on basis of the number of shares then held by him under this plan.

DEATH, PERMANENT DISABILITY OR PENSIONING

Tenth—If a subscriber dies, is permanently disabled or pensioned while rendering faithful service during such five years' period, payment will be made to his estate or to him, as follows:

(a) If his subscription is fully paid and he has received and not disposed of his certificate of stock, the Corporation will pay a sum equal to $5.00 per share for each of the five years not then expired, and also a pro rata amount of the special fund arising from forfeitures, referred to in Section Ninth preceding, which may have accrued at the time of his death, disability or pensioning.

(b) If his subscription has not been paid in full, the Corporation will pay (unless, if pensioned, he elects to continue payment on the stock as provided in final paragraph of this section) the money theretofore paid in by him on account, together with the dividends paid on the stock subscribed for, the special allowance for the entire five years' period and a pro rata share of the amount of the special fund mentioned, less interest at 5% per annum on deferred installments.

(c) If at time of decease, permanent disablement or pensioning the subscription has been fully paid but certificate not yet delivered, the Corporation will turn over the certificate as first stated above, together with the additional payments mentioned in paragraph (a) preceding.

A pensioner will not be permitted to subscribe, but any subscriber who is subsequently pensioned may continue payments on his subscription, and when fully paid he will receive the certificate for the stock subscribed for and the payments referred to in paragraph (a) above.

BENEFICIARY

Eleventh—A subscriber may name in his subscription as beneficiary the person to whom in the event of his death he desires the Corporation to pay all amounts, in connection with his subscription, which would otherwise be payable to his estate. By written notice delivered to the Treasurer of the Company by which he is employed he may substitute another beneficiary. The Corporation, upon satisfactory proof of death, will, under the conditions of the subscription, pay to such beneficiary all amounts in connection with the subscription which would otherwise be payable to the estate of the subscriber. When the beneficiary has been named the subscriber's estate shall have no claim to any such amounts, unless the beneficiary should die before the subscriber, and in that event payment will be made to the subscriber's estate.

SUSPENSION OF EMPLOYMENT

Twelfth—Subscribers whose employment has been suspended by reason of the temporary closing of a plant, or a reduction in its operation, and who shall continue ready and willing when required to resume their service, will not be deprived of the special allowance of $5.00 per share per year, during such suspension, although they may have accepted

employment during such suspension. As presumptive evidence of willingness to resume employment, the Corporation will accept (1) from the holders of fully-paid subscriptions, the exhibition of the original certificate in January of each year, and (2) from the holders of partly-paid subscriptions, the retention by them of their subscription during the preceding year.

The above period of suspension will not be counted as part of the three years limited for the full payment of the subscriptions, and during such suspension monthly payments will not be required, though if so desired by the employe they may be continued.

In case of the death during such suspension of any such subscribing and continuing employe, his estate or his beneficiary will be entitled to the same benefits accruing to his subscription as if he had died while under employment.

Failure to present the original certificate as provided, or the withdrawal of a partly-paid subscription, or the failure to resume employment when requested, will constitute a relinquishment of all benefits referred to in this circular.

If a plant or office is permanently abandoned and a subscriber at such plant or office does not continue in the service at another plant or office of the Corporation or a subsidiary company, settlement of his subscription accounts will be made as provided in case of pensioned employes, Section Tenth.

Thirteenth—Subscriptions will be received until February 5, 1923, and allotment made as soon thereafter as possible.

THE STUDEBAKER CORPORATION.—The co-operative plans of the Studebaker Corporation are reproduced below.

THE STUDEBAKER CORPORATION

ANNIVERSARY CHECK PLAN

1. Continuous service is necessary to entitle employees to receive anniversary checks although absence of thirty days or less, due to sickness, vacations, suspension of operations, or leave of absences, will not be regarded as interruption of continuous service. Absences without leave, aggregating six full working days or more in employees' anniversary year, will operate as a rupture of continuous service. Employees who have been absent in the war service will not, thereby, affect their continuous service record.

2. Employees will receive anniversary checks on each anniversary date of their employment, based on their total earnings for the previous year, at the following rates per cent:

On the First anniversary	5%
On the Second anniversary	5%
On the Third anniversary	5%
On the Fourth anniversary	5%
On the Fifth and each succeeding anniversary	10%

3. Employees who resign or are dismissed, or who, with or without cause, cease to continue in the service, will not receive anniversary checks for the fractional year of service, from the date of the commencement of service, or the last anniversary.

STOCK PURCHASE PLAN

1. At one or more appointed times during each year, the Corporation will offer to its employees the privilege of subscribing to the purchase of a fixed number of shares of its common stock. This privilege will be restricted to employees who have been in the service of the Corporation for three months or more, and to individual subscriptions aggregating in any one anniversary year an amount not exceeding Three Hundred Dollars ($300.00) in purchase price, and not exceeding 20% of employees' annual rate of earnings. The announcement of each offering will specify the number of shares open to subscription, the period during which subscriptions will be received, and the price at which stock will be sold. The price will be approximately the current market value of the stock. As soon as possible after the closing of subscriptions, allotments will be made, and subscribing employees will be notified of the number of shares assigned to them. In the event of over-subscription, the corporation reserves the right to make allotments to subscribing employees of less than their individual subscriptions, on such a basis as it may deem to be fair and equitable.

2. Within fifteen days of the allotment of shares and announcement thereof, subscribing

employees shall be required to make an initial payment, in cash, amounting to 10% of the purchase price. The remaining 90% thereof will be payable in equal monthly installments of 3% of the purchase price, commencing one month from date of initial payment. Interest will be charged semi-annually, at the rate of 6% per annum, on unpaid balance of employee's account. All cash dividends and stock dividends will be credited to the accounts of subscribing employees, and the excess of dividend credits over interest charges will act as a reduction in the amount of the final payment to be made by employees.

3. Each employee, upon making his initial payment, will receive a Participating Certificate identified with the shares of stock which the corporation has purchased for his account under this plan. If he remains continuously in the service of the corporation, as herein defined, and meets, when due, his obligations in respect to his subscription for purchase of stock, this Participating Certificate shall entitle him to special reward for continuous service, consisting of an additional credit of one-half of the credit for cash dividends, if any, on the shares of stock held by the corporation for him. These credits shall continue to be made until the purchase of his stock is completed and stock certificates are delivered to him.

4. When stock certificates are delivered to employee, the numbers and identity thereof shall be endorsed upon employee's Participating Certificate. If he remains in the continuous service of the corporation, and owns and holds, without interruption, the stock purchased by him under this plan, his Participating Certificate shall entitle him to receive, in cash, from time to time as cash dividends are paid on his common stock, the special reward for continuous service described in the preceding paragraph. The agreement by the corporation to pay the special rewards for continuous service, as specified in this paragraph, is made for one year only, and any continuation thereof is subject to approval by the directors.

5. Employees may anticipate monthly payments, but stock purchased and paid for under this plan will not be delivered to employees until the expiration of thirty months from the date of purchase. Stock purchased for employees will be held by the corporation, in its name, until the conditions of purchase have been complied with, and will then be delivered to employees.

6. Fractional shares will not be purchased for employees, or delivered to them upon settlement of their accounts. Fractional shares of stock dividends will be sold at the market value, and the proceeds held for employee's account.

7. Employees will not be allowed to assign or transfer their rights to stock undelivered under this plan, which rights are personal and contingent upon continuous service.

8. As participation in this plan is voluntary and in no way compulsory, employees may, at any time, withdraw from participation, but in such event they shall not be entitled to any of the benefits of the plan, but shall be entitled to receive only the actual amount of money paid in by them, plus interest thereon at the rate of 6% per annum, computed semi-annually, less the amount of cash dividends and any other cash payments. Employees withdrawing from the plan shall not be permitted to participate in the next succeeding year's subscription.

9. Employees who resign or are dismissed, or who, with or without cause, cease to continue in the service, or who fail to maintain their installments when due, will automatically be withdrawn from the plan, on the same basis as above provided for voluntary withdrawal.

10. In the event of the death of a participating employee, his heirs or legal representatives may pay the balance due on his stock, either in full or in installments, without bonus credits after death, and receive stock certificates, or may withdraw on the terms herein provided for voluntary withdrawal.

11. Continuous service is necessary to entitle employees to purchase stock of the corporation under the liberal terms of this plan, although absence of thirty days or less, due to sickness, vacations, suspension of operations, or leave of absence, will not be regarded as interruptions of continuous service. Absences without leave, aggregating six full working days or more in employee's anniversary year, will operate as a rupture of continuous service.

12. Should this plan be permanently discontinued as of December 31, 1923, uncompleted stock purchase transactions then outstanding may be completed by employees under the above terms.

VACATION PLAN

In addition to the plans under which regular employees receive anniversary checks, stock purchase privileges, pensions and life insurance, the directors have determined to grant

annual vacations of one week, with pay, to factory employees. Very few large industrial corporations in America offer this privilege. This plan involves a heavy annual expense upon the corporation, which employees can largely offset by prompt attendance and loyal application to duty during the remaining fifty-one weeks of the year.

The plan is as follows:

1. All employees who have been continuously in the service of the corporation for two years or more will be entitled to annual vacations of one week, with full pay in the same amount as earned in the last standard week of the anniversary year, in respect of which the vacation is granted, provided their records for the previous year show that they have been satisfactorily prompt and regular in attendance. Occasional unavoidable tardiness or absence of thirty days or less, due to sickness, suspended operations, or leave of absence, will not be regarded as irregularities canceling vacation privileges. Abnormal tardiness, or absences without leave aggregating six full working days or more in employee's anniversary year, will operate as a forfeiture of this privilege.

2. The dates of vacations will be arranged by the management to suit the convenience of employees, and at the same time interfere as little as possible with the work of the departments.

PENSION AND LIFE INSURANCE PLANS

1. Any employee whose annual earnings for the preceding five years average not more than $3,000 per annum, who has been continuously in the service of the corporation for twenty years or more, and who has reached the age of sixty years, may voluntarily retire, or be retired on a pension, the amount of which shall be 25% of his average annual earnings for the preceding five years, with a minimum of $30 per month.

2. This plan is obviously intended to enable employees to retire from active service at a suitable time; therefore, employees drawing pensions under this plan may not engage their services to others without the consent of the corporation.

3. The corporation will continue faithfully to carry out the benefits accruing to employees under the Workmen's Compensation Acts of the states of Indiana and Michigan. In cases of disabled employees receiving benefits under these acts, pensions will not be paid by the corporation under this plan unless, in the judgment of the management, the benefits under said acts are not sufficient to meet the necessary requirements of the case. Each case will be considered on its merits.

4. In the event of the death of an employee of the corporation whose annual earnings were not more than $3,000, who had been in the employ of the corporation continuously for five years or more, and who leaves dependents; or in the event of the death of a pensioner who leaves dependent wife or minor child, the corporation will pay to such dependents the sum of Five Hundred Dollars ($500), in such a manner, at such a time or times, and with such a division of this sum between the dependents as may, in its judgment, best serve their necessities.

5. Should this plan be permanently discontinued as of December 31, 1923, employees then drawing pensions will continue to receive them, and employees who have to their credit, at that time, ten years or more of continuous service, will be eligible for pensions under the above terms, upon the completion of twenty years of continuous service.

GENERAL PLANS

In addition to the plans described in the foregoing pages, the management of the corporation is interested in everything affecting the health, happiness and prosperity of its employees, and a partial description of some of its activities in these directions is given below:

1. Working Conditions. The policy of the corporation is to provide cheerful and healthful working conditions, and its plants are equipped with the most modern improvements in heating, lighting, ventilation and sanitation.

2. Emergency Hospital. The corporation maintains fully equipped emergency hospitals at its Detroit, South Bend and Walkerville plants, in charge of skilled physicians and nurses, who give first aid to sick and injured employees.

3. Workmen's Compensation Act. It is the policy of the corporation to faithfully observe the provisions of the Workmen's Compensation Acts of the states of Indiana and Michigan, and it maintains organizations in its factories for that purpose.

4. Recreation and Amusement. Employees of the plants at Detroit and South Bend

maintain bands, orchestras, ball teams, bowling teams, clubs, etc., and the corporation believes in encouraging such organizations to the fullest extent.

5. The corporation has expended upwards of $2,000,000 for the purchase of sites and for the erection of homes, which are being sold to employees at less than cost, and at very favorable terms.

BONUS PLAN FOR MANAGEMENT FOR 1923

The co-operative plans for the benefit of the large body of our employees whose positions do not involve responsibilities of management will remain in effect during the year of 1923. The payments and credits under these plans are fixed expenses which must be met whether or not profits are made by the Corporation, and labor therefore is receiving preferential consideration in the conduct of our business.

Recognizing the responsibility of management for successful results and the value of efficient work, the directors on April 3rd authorized the continuance of the "Bonus Plan for Management," under which special rewards are offered to management, for the fiscal year of 1923, under the following terms and conditions:

1. No beneficiary of the co-operative plans (anniversary check, co-partnership, vacation, pension and life insurance plans), nor employee holding a contract covering special compensation, in the nature of commissions or participation in profits, shall participate in the Bonus Plan for Management, without the approval of the directors.

2. The Bonus Plan for Management shall be administered by the Finance Committee, and is adopted for the fiscal year of 1923 only.

3. In consideration of the salaries it receives, management must earn certain returns on the investment of stockholders before benefits shall accrue under this plan. After such returns are earned the amount of the bonus fund, if any, for the year shall be determined in the following manner: From the consolidated net profits of The Studebaker Corporation and its subsidiary companies, as certified to by our auditors, there shall be deducted (1) the amount of the 7% dividends due on the preferred stock during the year, (2) the amount which under its charter the Corporation is required to set aside annually in special surplus account for the amortization of preferred stock, and (3) a further amount equal to 7% upon the common stock outstanding. If the net profits exceed this amount (approximately $6,300,000), but not otherwise, certain percentages of the excess net profits will be credited to the bonus fund, as follows:

5%	on	the	first	$1,000,000	of	excess	net profits
6%	"	"	next	$1,000,000	"	"	" "
7%	"	"	"	$1,000,000	"	"	" "
8%	"	"	"	$1,000,000	"	"	" "
9%	"	"	"	$1,000,000	"	"	" "
10%	"	all	above	$5,000,000	"	"	" "

The bonus fund will be distributed among participants according to the importance of the positions held and to the extent the Finance Committee may deem each participant to have contributed to the Corporation's profits by reason of his position, worth and loyalty. The amount to which each participant is entitled will be credited to his account. Either all or one-half of the amount will be promptly paid in cash, and the remaining one-half, if withheld, will be invested in common stock of the Corporation for the account of each participant. Subject to possible forfeiture as mentioned below, 25% of said stock will be delivered to participants within thirty days after February 1st, 1925, 25% within thirty days after February 1st, 1926, and 50% within thirty days after February 1st, 1927, provided participants have continued uninterruptedly in the service of the Corporation to said dates. In case participants resign or are discharged by the Corporation for cause or for any other reason, of which the Corporation shall be the sole judge, they shall forfeit all or any part of said stock which the Finance Committee in its discretion may decide. In case participants die or are disabled through injury or sickness, they or their legal representatives shall thereupon receive the full amount of stock without penalty. Participants shall have no right to assign stock held for their account by the Corporation. All cash dividends received upon said stock will be paid participants upon receipt by the Corporation.

4. In case you are discharged or resign during the year of 1923, you shall automatically forfeit all rights of participation in the bonus fund of this year, but if you are released on account of curtailment in business or shut-downs in the factory, and not on account of lack

of efficiency, you shall receive a pro rata distribution of the fund of the current year, and the full amount of common stock held for your account from previous years, if any.

The position you hold qualifies you to participate in the Bonus Plan for Management for this year, but this statement of intention concerning a voluntary and contingent distribution of a part of the profits of the Corporation does not in any way constitute a contract on the part of the Corporation to make such distribution, nor alter or affect any of its contract relations with you or other employees. Moreover, the Corporation reserves the right, at its discretion at any time, to change or withdraw the plan as a whole or with respect to any individual participant. Unless you accept this offer of participation subject to these reservations, you must at once notify the Treasurer in writing, as in the absence of his receipt of such notification, we will understand that you accept participation on these conditions.

SPECIAL COMPENSATION PLAN FOR SALARIED EMPLOYEES.—(Name of company withheld.)

SPECIAL COMPENSATION PLAN APPLICABLE TO SALARIED EMPLOYEES

1. At the end of each fiscal year, the Management renews its recommendation to the Board of Directors that a Special Compensation Fund be created. If the Board of Directors is convinced that the Management's plan for Special Compensation should be continued, authority is given through proper resolution of the Board to set aside some certain percentage of net earnings, to be distributed as, in the judgment of the Management, will be for the best interests of the Company and its working organization.

2. The percentages of net earnings so authorized to be set aside, will vary from year to year as conditions warrant or necessitate, but will be as liberal as the Board of Directors can be convinced is sound and in the best interests of the Company, its stockholders and its employees.

3. Beginning January 1, 1922, and until due notice of change has been given, the following regulations shall govern the distribution of the Special Compensation Fund.

ELIGIBILITY

4. All employees, other than officers whose entire compensation is fixed by the Board of Directors, who are being paid monthly salary on December 31, the end of the Company's fiscal year, who have at that time been in the continuous service of the company for one year or more, that is, all those who are insured under the Group Insurance Plan, are eligible to participate.

5. At the end of the fiscal year a list will be made of all eligible employees, and this list will be separated into three groups. Classification of individuals will be based on responsibility of position held and the extent to which such position gives the individual opportunity to influence and direct Policies, and to affect Profits.

GROUP ONE will include all heads of Divisions, their assistants and the heads of the principal departments. The members of this group are called SPECIAL PARTNERS.

GROUP TWO will include some assistants and the heads of other departments.

GROUP THREE will include all other eligible salaried employees.

6. Each eligible employee in Groups Two and Three will be furnished with a blank Certificate of Participation each six months. This Certificate must be approved by the Department Head and the Head of the Division to which the individual belongs through a personal interview to entitle the individual to the full amount allotted under the plan.

REGULATIONS GOVERNING DISTRIBUTION OF FUND

7. Two-thirds of the Special Compensation Fund will be allotted to the "Special Partner Group" and will be apportioned to the individuals comprising that group by the Management, as in their judgment seems fair and equitable.

8. The balance of the Fund will be allotted to Groups Two and Three. Other factors being equal, participants in Group Two will receive three times as much as participants in Group Three.

9. The distribution to participants in Groups Two and Three will be made in direct proportion to their monthly salaries as effective on December 31, plus 10% for each full year of service up to and including ten years.

10. Since an employee is credited with an additional 10% increase in his share of Special Compensation for each year's service, the manner of figuring the distribution to participants in Group Three will be as follows:

The figures representing the December 31 salary will be increased by 10% for each year's service of each employee up to and including ten years—and this will give the factor for participation.

Group Two is figured in the same way except that each participant's factor is multiplied by three.

The sum of all the participant's factors in Groups Two and Three is divided into the total sum of money allotted to these groups and the result of this division multiplied by a participant's factor, gives the amount of money to which such participant is entitled.

11. The Special Compensation Fund will be distributed as soon as possible, usually in May following the end of the fiscal year.

12. Not less than 50% of the total amount apportioned to each individual in any one year will be paid in cash at the time of annual distribution; any proportion not so paid will be held in reserve for future cash distribution, over a period not to exceed three years.

13. Only those who were eligible to participate during the year in which a reserve fund was created will be eligible to share in the distribution of that particular fund.

SALARIES

14. Salaries are regulated after giving due consideration to the character and responsibility of positions held, efficiency, general ability shown in discharge of duties assigned, loyalty to Company interests, term of service, and as far as possible to salaries paid to persons holding comparable positions in competitive companies. These factors are considered independently of any plan for Special Compensation.

EMPLOYEE STOCK OWNERSHIP AND PROFIT-SHARING PLANS.—(Name of company withheld.)

PROFIT-SHARING PLAN

The Executive Committee of the ..... Company announces that:

FIRST: There has been set aside a certain sum as a Profit Sharing Fund, for distribution as soon after May 15th, 1920, as shall be practicable, among various officers and employees of said Company and its Subsidiary Companies to be selected by said Committee. In so far as any employee receiving a salary less than $5,000 per annum is selected to share in said Fund, his share will be paid to him as soon as possible in cash. When the salary of the officer or employee thus selected shall be at the rate of $5,000 per annum or more, about 60% of his share of said Fund will be so paid in cash and the remainder, under conditions hereinafter stated, in non-assignable Conditional Certificates of Interest in the common stock of the ..... Company on the basis of $100 per share. If 40% of any such allotment is insufficient to so purchase one share of said stock, then said 40% shall be paid in cash, and if such 40% shall purchase one share or a multiple thereof, then any excess over such purchase price shall be paid in cash.

The Certificates of Interest above referred to shall provide among other things as follows:

(a) That if such participant shall remain continuously in the service of the Company or of one or another of its subsidiary companies until April 1st, 1925, and shall during all of such time have rendered faithful and satisfactory service to such Company or to one or another of its subsidiary companies, the stock called for by his Conditional Certificate will be delivered to him as his property upon surrender of his said Conditional Certificate.

(b) That he will receive such dividends as are declared on the stock, while it is so held for his account.

(c) That if he shall voluntarily quit the service of the Company or of a subsidiary company (except that such voluntary retirement be made under any general

pension scheme which may hereafter be adopted), or shall be discharged or removed for cause by his employer before April 1st, 1925, he shall forfeit all right to the stock and to the Conditional Certificate; and in that case such stock will be held in a Fund which at the end of the five years above named will be divided pro rata according to their respective interests among such officers and employees as shall then be entitled to the delivery of the stock called for by the Certificates of Interest held by them.

(d) That if before April 1st, 1925, he dies, or becomes totally and permanently disabled while in the employ of the Company or of one or another of its subsidiary companies, the stock will be delivered to his estate (or to him if disabled) together with such pro rata amount of additions, if any, as have accrued up to the time of his death or disablement. If a beneficiary has been named in his Subscription Agreement, Series 1920, referred to below, and such designation has not been changed, delivery will be made to the person so designated, if then living, and the participant's estate shall have no claim to such stock or additions.

SECOND: All questions relating to the meaning or construction hereof or to the rights r interests of any officer or employee in, or growing out of, the Stock or Fund above menioned or referred to shall be determined by the Executive Committee of the .... Company and by it alone; and its decision shall be final and conclusive as to ll parties, and the Fund above referred to is to be created on that condition; and the ction of a majority of said Executive Committee shall be as binding and conclusive in very case as the unanimous action of the entire Committee would be.

THIRD: It is understood that the above mentioned Profit Sharing Fund will be distribted and Plan administered with special reference to those whose Subscription Agreement, eries 1920, shall have been approved and accepted by the Company.

By order of the Executive Committee,

EMPLOYEE STOCK OWNERSHIP PLAN

The Company offers to officers and employees, whose salaries are at the rate of Thirteen lundred Dollars per annum or over, the opportunity to subscribe for shares of its Common tock heretofore issued and now held by and in the Treasury of the Company, at the price f $100 per share, subject to the following conditions:

FIRST: All subscriptions shall be for the value of one or more shares of Common Stock at ne price of $100 per share and upon the express condition that there may be allotted to the ubscriber all or any part of his subscription as the Executive Committee may determine.

SECOND: The maximum amount which may be subscribed for hereunder by such officers nd employees respectively will be governed by varying percentages of their respective alaries, which percentages will be determined in each case by the Executive Committee, keeping in mind the salary and position of the individual; and, as respects..... .....such maximum amount is..... (.....) shares.

THIRD: Payment on the subscriptions shall be made in monthly installments, to be educted from the salary of the subscriber in such amounts as he may desire, subject to ne provision that the minimum amount of a monthly installment shall be $10 per share. he subscriber may anticipate such payment to such extent as he may desire, but any nount so paid in anticipation shall be in even dollars. Interest at 5% per annum will e charged by the Company on all amounts unpaid on the stock.

FOURTH: From the date on which payments begin and during the continuation of such ayments all dividends paid on the stock will be credited to the subscription account of the ubscriber until the stock is fully paid for and issued to him, after which dividends will be aid in the same manner as to other stockholders.

FIFTH: In case a subscriber shall cancel his subscription before his stock shall have been lly paid for there will be returned to him the exact amount of his payments made on ccount with interest at 5% per annum on the same from time of payment, no credit being ven him for dividends or for the special allowance referred to in Section Sixth hereof, nd no interest being charged on deferred payments, and thereupon his subscription and l interest in the stock to which the same relates shall cease and determine. Whenever ch payments shall have been discontinued without the consent of the Company for the eriod of three months, his account will be closed forthwith and his interest in the stock all cease and his payments on account will be returned to him as above stated.

No subscriber can cancel part of his subscription unless he cancels all of it.

SIXTH: As soon as the stock shall have been fully paid for and not before, it will be issued in the name of the subscriber. The subscriber may then sell his certificate whenever he chooses, but as an inducement for him to keep it and to remain continuously in the employ of the Company or of one or another of its subsidiary companies, the following offer is made, viz.:

If he does not sell or part with any part of the said stock but shall keep it and on the 1st of April, 1921, and the 1st of April for four consecutive years thereafter shall exhibit the certificate to an official designated by the Company and obtain from him a certificate to the effect that he has been continuously in the employ of the Company or of one or another of its subsidiary companies during the whole preceding year and has shown a proper interest in its welfare and progress, he will for each of such five years receive from the Company a cash payment at the rate of $3 a share for each share of said stock.

SEVENTH: If the subscriber shall retain his said certificate and remain continuously in the service of the Company or of one or another of its subsidiary companies for said five years, the Company intends that he shall then receive a still further compensation, which cannot now be ascertained, but which it is intended will be derived from the following sources, viz.:

Subscribers for stock under this offer whose subscriptions are cancelled before being paid in full will forfeit and will not receive the special allowance of $3 per share referred to in Section Sixth hereof. Nor will such special allowance be paid for such of the five years as remain after forfeiture to subscribers whose certificates may be transferred from their names at any time during the five years, whether intentionally or otherwise; nor to subscribers who after receiving their certificates do not remain continuously in the service as provided in Section Sixth. The Company will, however, pay into a Special Fund at the end of each remaining year of said five years the said $3 allowances forfeited by subscribers as aforesaid. This latter Fund shall be credited with 5% annual interest, and at the end of the five years' period the total amount thus accumulated will be divided into as many equal parts as shall be equal to the number of shares of said Common Stock issued as aforesaid to and then remaining in the hands of subscribers who shall have so continued in such employ for the whole of said five years. The Company will then by its own final determination award to each then remaining subscriber whom it shall find deserving thereof as many parts of such accumulated Fund as he shall be entitled to on the basis of the number of said shares then held by him under this plan as compared with said total number.

EIGHTH: In case a subscriber dies or becomes permanently disabled while faithfully serving the Company or one of its subsidiary companies during such five years' period, payments will be made to his estate or to him as follows:

(a) If his subscription is fully paid and he has received and not disposed of his certificate, the Company will pay, as above stated in Section Sixth a sum equal to $3 per share for each of the five years not then expired, and also a pro rata amount of the Special Fund mentioned in Section Seventh, arising from the said forfeitures which may have accrued at the time of his death or disablement.

(b) If his subscription has not been paid in full, the Company will pay, as stated, the money theretofore paid in by him on account, together with the dividends paid on the stock subscribed for, the special allowance for the entire five years period and a pro rata share of the amount of the Special Fund mentioned in paragraph (a) preceding, less interest at 5% per annum on unpaid amounts.

(c) If at the time of decease or permanent disablement the subscription has been fully paid but certificate not yet delivered, the Company will deliver the certificate, as first stated above, together with the additional payments as mentioned in paragraph (a) preceding.

NINTH: A subscriber may designate in his subscription the person to whom in the event of his death he desires the Company to deliver all amounts or stock in connection with his subscription which would otherwise be deliverable to his estate. When such designation has been made and shall not have been changed, the Company, upon satisfactory proof of death under the conditions of the subscription, will deliver to the person designated, if then living, all amounts or stock in connection with the subscription which would otherwise be deliverable to the estate of the subscriber. When such designation has been made, the subscriber's estate shall have no claim to any such amounts or stock, unless the person designated or his substitute or substitutes should die before the subscriber, and in that

vent delivery will be made to the subscriber's estate. By written notice delivered to the Treasurer of the Company by which he is employed, a subscriber may change the person designated.

Tenth: Subscribing officers and employees whose employment has been or may be suspended by reason of the temporary closing of the Company's plants and who shall continue ready and willing when required to resume their service will not be deprived of the special cash payment of $3 per share per year during such suspension. During such suspension monthly payments will not be required, though if so desired by the officer or employee they may then be made.

In case of the death during such suspension of any such officer or employee, his estate or his designee as above will be entitled to the same benefit accruing to his subscription as if he had died while under employment.

Failure to present the original certificate, as provided, or the withdrawal of a partly-paid subscription or the failure to resume employment when requested will constitute and will be deemed conclusive evidence of the termination of his employment by such officer or employee and a relinquishment of all benefits referred to above.

Eleventh: All subscriptions shall be upon the express understanding and condition that the decision of the Executive Committee of the .....Company, as said Committee shall from time to time be constituted, shall at all times be final with respect to the construction and meaning hereof and to the rights or interests of the subscribers or any question relating to or arising out of the same, and that the vote of a majority of the Committee shall be as conclusive as the unanimous vote of said Committee.

Twelfth: Subscriptions will be received until May 10, 1920, inclusive, and allotment will be made a few days later. The first deductions will be made from May salary.

SECTION 25

ACCOUNTS AND AUDITS

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SECTION 25

ACCOUNTS AND AUDITS

This section deals with the principles and technique of general accounting and auditing. It will be confined to those principles that are of fundamental importance in financial statements and to those matters of technique that are of significance from the administrative standpoint. The financial manager is as much interested in the statements of other corporations as in the statements of the company with which he is associated, and this section is written with regard for that consideration.

Fundamental Principles of Classification

IMPORTANT DISTINCTIONS OF CLASSIFICATION.—The following distinctions of classification are the important ones:

Distinction between depreciation as expense and as appropriation of profits.
Distinction between charges to assets and expense, or, as this is often expressed, charges to capital versus charges to income.
Distinction between charges to depreciation reserve and expense.
Distinction between different classes of so-called reserve accounts.
Distinction between profits and disposition thereof.
Distinction between profits and capital losses and gains.
Distinction between classes of surplus.
Distinction between current assets and other assets.
Distinction between current liabilities and other liabilities.

These distinctions have weight in determinations of **credit rating, earning capacity and capital structures** of every corporation. It is vital to soundness of judgment that the financial manager consider these distinctions critically when he has occasion to analyze the statements of another corporation than his own with a view to appraising its financial stability and earning power.

On the following page is a chart showing classification of all types of debit and credit accounts in five groups that are significant from the financial manager's viewpoint. In the first group are the types of accounts that are exhibited in the balance sheet to represent **financial condition at a given date.** In the second group are the types of **income and expense accounts** which form the elements of a statement of earnings or profits for a given period. The third group is designated capital loss and gain; it consists of types of accounts that represent **increases or decreases in surplus** arising from sources other than the regular operations of one year. The fourth group, which is denoted profit and surplus disposition, includes types of accounts that represent **distribution or appropriation of profits and surplus.** A complete annual report of the financial status and progress of a corporation includes not only a balance sheet and a statement of income and expense, but also a summary of the transactions,

if any, in the class of capital loss and gain and a summary of distributions and appropriations of profits and surplus. Each account in the first four groups, therefore, has its place in the corporation's annual financial report. The fifth group on the chart is supplementary. These accounts may appear in the books during the year but the balances in these accounts do not ordinarily enter directly into annual financial statements.

Classification of All Types of Debit and Credit Accounts

Group	Debit	Credit
1. Balance Sheet	Current assets Fixed assets Other assets Deficit	Current liabilities Other liabilities Depreciation or retirement reserves Depletion reserves Capital stock Surplus
2. Income and Expense	Operating costs Manufacturing, trading, selling, administrative and corporate expenses Depreciation expense Retirement expense Depletion expense Interest expense	Sales Interest earned Other revenues or earnings
3. Capital Loss and Gain	Extraordinary losses and amortization not applicable to operations of one year Premiums on par value capital stock redeemed	Extraordinary gains not included as income of one year Unrealized appreciation Premiums on par value capital stock issued Discount on par value capital stock redeemed
4. Profit and Surplus Disposition	Dividends declared Appropriations for sinking funds Appropriations for permanent investment Appropriations for contingencies	
5. Supplementary (Balances in the accounts opposite are not ordinarily components of yearly statements)	Unadjusted items in suspense Clearing, apportionment and equalization of expense	Profit and Loss (as a closing account) Unadjusted items in suspense Clearing, apportionment and equalization of income Overhead burden Completed manufacturing processes (at estimated or standard costs)

A debit account in any group has a definite significance distinct from that of an account in another group. If any debit account represented on a balance sheet includes elements that properly belong to one of the other groups, then the balance sheet would be inaccurate and might be misleading. The financial manager is continually confronted with the necessity of deciding, both in statements of his own company and in statements of other corporations, whether a certain debit account properly belongs to the balance sheet group or to some other group. Decision as to the proper classification of a debit or

credit account is often a matter of policy. The manner in which a corporation settles such questions is an index of that company's financial policy. For that reason a financial manager who is studying the finances of a company other than his own learns much about that company's financial policies from the character of its accounting policies.

DEPRECIATION EXPENSE.—Directors and executives have full latitude in the determination of provisions for depreciation to be recognized in the books of account. In their discretion they may set the annual allowance for depreciation at a very large amount or make no provision for it whatsoever on the books; or they may fix upon an intermediate course. What they do each year in regard to depreciation is an indication to the astute analyst, who has access to the company's financial statements, whether the management has a **consistent plan of depreciation** or whether the provisions are made to vary according to the exigencies of the particular year. Depreciation is an **operating expense,** not an appropriation of net profits. This view of depreciation is well expressed by the late Professor Henry C. Adams, writing on railroad accounts, but the principle enunciated applies with equal force to industrial accounts.

"When carried to its final analysis the question of formal depreciation charges to operating expenses is simply a question of what constitutes cost of operation, and the time when such cost shall be acknowledged in the accounts. The position which the Interstate Commerce Commission's system of accounts assumes on this point is, that the depletion of an asset which represents an investment through the use of that asset in operation creates an item of cost of operation which should be reflected in the accounts when the fact of such depletion takes place, and that a statement of net revenue made without including this element of cost in operation expenses is an erroneous statement."

The **significance of depreciation** and the **basis for the estimate of the amount** of depreciation are explained in Uniform System of Accounts for Telephone Companies, as prescribed by the Interstate Commerce Commission:

"Depreciation of Plant and Equipment: Telephone companies should include in operating expenses depreciation charges for the purpose of creating proper and adequate reserves to cover the expenses of depreciation currently accruing in the tangible fixed capital. By expense of depreciation is meant—

(a) The losses suffered through the current lessening in value of tangible property from wear and tear (not covered by current repairs).

(b) Obsolescence or inadequacy resulting from age, physical change, or supersession by reason of new inventions and discoveries, changes in popular demand, or public requirements, and

(c) Losses suffered through destruction of property by extraordinary casualties.

"The amount charged as expense of depreciation should be based upon rules determined by the accounting company. Such rules may be derived from a consideration of the company's history and experience. Companies should be prepared to furnish the Commission, upon demand, the rules and a sworn statement of the facts, expert opinions, and estimates upon which they are based.

"The estimate for depreciation of physical property should take into account—

(a) The gradual deterioration and ultimate retirement of units of property which may be satisfactorily individualized, such as buildings, machines, valuable instruments, etc., to the end that by the time such units of property go out of service there shall have been accumulated a reserve equal to the original money cost of such property plus expenses incident to retirement less the value of any salvage.

(b) The depreciation accruing in property which cannot be readily individualized, such as pole lines, wires, cables, or other continuous structures, where expenditures for repairs or replacements of individual parts ordinarily are not actually made until the later years of the life in service of such property, and when made may, therefore, be classed as extraordinary repairs.

"The rate of depreciation should be fixed so as to distribute, as nearly as may be, evenly throughout the life of the depreciating property the burden of repairs and the cost of capital consumed in operations during a given month or year, and should be based upon the average life of the units comprised in the respective classes of property.

"The amount estimated to cover the expense of depreciation of fixed capital should be charged monthly to account No. 608, 'Depreciation of Plant and Equipment' (or to the appropriate clearing account or accounts), and concurrently credited to account No. 102, 'Reserve for Accrued Depreciation—Cr.' "

RETIREMENT EXPENSE.—Public utilities have evolved in recent years a theory of provision for ultimate abandonments of property that departs somewhat from the concept of depreciation. This theory has already been adopted by a large number of public utilities and has received the endorsement of public utility commissions in a majority of the states. Depreciation as a title of an account is supplanted by the term **"Retirement Expense."** The Committee on Statistics and Accounts of Public Utilities has defined "retirement expense" in these words:

"This account shall include such amounts as the accounting company charges to operating expenses, in addition to amounts appropriated from surplus, to provide a reserve against which may be charged the original cost of all property retired from service, plus the cost of dismantling, less salvage. The amounts charged to this account and those appropriated from surplus and credited to the 'Retirement Reserve' shall be in addition to the necessary cost of keeping the plant and equipment in a high state of efficiency through charges to the regular maintenance accounts.

"Note:—It is the intent of the classification that a reserve shall be provided, either through retirement expenses or by appropriations from surplus, or both, sufficient to cover all retirement losses that may reasonably be expected."

As the note in this quotation plainly states, provisions for retirements may be made either through retirement expense or by appropriations from surplus, or both.

DEFINITION OF RETIREMENT RESERVE.—The full significance of the theory underlying the meaning of retirement expense cannot be grasped without reference to the Committee's definition of retirement reserve which follows:

"To this account shall be credited such amounts as are charged to the operating expense account 'Retirement Expense,' appropriated from surplus, or both, to cover the retirement loss represented by the excess of the original cost, plus cost of dismantling, over the salvage value of fixed capital retired from service. When any fixed capital is retired from service, the original cost thereof (estimated if not known, and where estimated, the facts on which the estimate is based should be stated in the entry) should be credited to the proper fixed capital account and charged, plus the cost of retirement, less salvage, to this account. If the credit balance in this account is insufficient to cover the retirement loss, the excess over the balance contained in the reserve should be charged to account No. 132, 'Property Abandoned,' which see, or to other appropriate account.

"The losses which this account is intended to cover are those incident to important retirements of buildings, of large sections of continuous structures, like gas mains or of definitely identifiable units of plant or equipment, and the object of the account is that the burden of such losses may be as nearly as is practicable equalized from year to year, but with due regard for amount of earnings available for this purpose in each year.

"**Note A:** When property is retired whose ledger value has been reduced below original cost, only the remaining ledger value shall be written off as retirement loss.

"**Note B:** When any property is retired whose ledger value is greater than the known or estimated cost, such excess shall be charged to Profit and Loss.

"**Note C:** If any property is sold for more than its original cost, the excess of its selling price over the cost of the property plus the cost of dismantling and selling, shall be credited to this account.

"**Note D:** If the accounting company has, previous to the effective date of this uniform classification of accounts, maintained a reserve under some other title, such as 'Depreciation Reserve,' for the purpose of equalizing retirement losses, the balance in such reserve, as at the effective date of this classification, shall be transferred to this account."

This definition frankly avows that the object of the account is—"that the burden of such losses may be as nearly as is practicable equalized from year to year but with due regard for amount of earnings available for this purpose in each year."

Public utility authorities are contending that allowances for retirement expense should be determined with regard first for available earnings, because **uniformity of earnings and dividends** insures the lowest possible cost of capital in the long run. This view was argued at great length before the Interstate Commerce Commission in 1923 in opposition to the theory of straight line depreciation as applied to electric and gas utilities. The Interstate Commerce Commission has not at this writing announced its position concerning straight line depreciation and retirement expense.

Since retirement expense is **accepted practice for so many public utilities** and public service commissions, the question may arise whether it is sound for industrial corporations. The fact that the rates of revenue and issues of capital securities of public utilities are subject to regulation by state commissions imposes conditions for which there is **no parallel in industrial enterprises.** Public utilities are regulated because they are monopolies. But the federal statutes prohibit agreements of price fixing and the Federal Trade Commission endeavors to rectify conditions of trade that would tend to restrict the course of free competition among industrial enterprises. An industrial corporation that ventures to postpone its provisions for depreciation or to adjust the annual provisions according to earnings of a particular year will not enjoy the entire confidence of investors and lenders; and its ability to raise new capital as needed rests on the maintenance of its credit. With an industrial corporation business standards still demand that depreciation should be first provided for out of earnings before any appropriation for dividends is considered.

One public service commission cannot bring itself to approve the idea of a utility distributing dividends before making provision for depreciation. In a recent decision, the Massachusetts commission said:

"We do not subscribe to the thought that dividends of a public utility should move in one direction only, and that up. Obviously during periods of high interest rates dividends must often be increased to enable a company readily

to dispose of its stock at par. On the other hand, we know of no reason, when the public interest so requires, why high rates of dividends may not be reduced when it will not impair the company's ability readily to obtain new capital, and particularly when done in order to maintain an adequate provision for depreciation. It follows that we do not approve the postponement of provisions for depreciation in order to comply with an order made by us fixing rates."

CHARGES TO PROPERTY OR EXPENSE.—It is a well known principle that properties or materials acquired or installed for permanent use or having a long life should be **charged to a fixed asset account** and that properties or materials purchased for consumption or having a short life should be **charged to expense.** The line of demarcation, however, is not sharp. The clearest definitions of proper charges to fixed asset accounts are to be found in the accounting classification of the Interstate Commerce Commission, which are given in Section 8, page 614. Costs which do not come within these definitions are proper charges to expense.

ALTERATIONS AND IMPROVEMENTS.—Alterations in the nature of improvements are **chargeable to fixed assets.** In the administration of the income tax the Treasury Department has made the following ruling, which is sound:

"No deduction from gross income may be made for any amounts paid out for new buildings or for permanent improvements or betterments made to increase the value of any property, or for any amounts expended in restoring property or in making good the exhaustion thereof for which an allowance for depreciation or depletion or other allowance is or has been made . . . . . (Art. 581.)"

DISCOUNT ON BOND ISSUES NOT A PROPER CHARGE TO CAPITAL.—"Under no ordinary circumstances is it correct to treat discount on bond issues as a charge to capital. It does not represent any property; for it is clearly incorrect to consider that the cost in cash of a piece of property varies according to the credit of the purchaser or constructor. Hence, where any such discounts have been charged to capital assets, it is essential for a proper understanding of the balance sheet that this fact should be clearly set forth. In effect, in corporation finance such discounts are frequently included in capital expenditure, as are many other fictitious items which represent either a sanguine estimate of future gains, or mere "water;" and this is done by the fiction of the sale of the property to a new company at a largely inflated value, for a price including the par value of the bonded debt; the intermediaries in this sale then selling the bonds at the market price. This principle has been extended also to **cases of reorganization** effected without any sale of assets, where the discounts on bonds, as well as bonuses of capital stock issued to facilitate the completion of the reorganization, have all been capitalized. These exceptions must not be taken as a justification for a similar treatment in ordinary cases of financing; and in fact, there is no real justification for their adoption in any case, beyond that of expediency. The whole system has led in the past to many and serious abuses, and the more strict supervision of capital issues which is now being extended over certain classes of corporations, will tend to put a stop to it in all cases. The objection to charging discount on bond issues to capital account must not, however, be held to include such a charge of the **annual instalment of discount for the period of construction** during which interest also is charged to capital account. The rate of interest chargeable to capital should be the actual cost of the money, i.e., the effective rate, and any

approximation to this rate obtained by including that proportion of the discount which belongs to the period would be a permissible charge to capital." (Arthur Lowes Dickinson.)

It is recognized by accountants and by Interstate Commerce Commission that it is proper to carry bond discount in the balance sheet as a **deferred debit** subject to annual amortization which will charge the account off to surplus during the life of the bonds.

DISCOUNT ON CAPITAL STOCK.—The Interstate Commerce Commission has declared that "in no case should discount on capital stock be charged to or included in any account as a part of the cost of acquiring any property, tangible or intangible, or as a part of the cost of operation." The Commission does provide for a deferred debit account in the balance sheet designated "unextinguished discount on capital stock" which remains as such until written off by a charge to surplus.

INTEREST DURING CONSTRUCTION.—Interest incurred during construction is a **proper charge to cost of construction.** Otherwise a concern may find that a profit and loss deficit existed with respect to a new plant before its completion. After completion a plant is expected to earn a sufficient profit to cover interest, but it is unreasonable to apply such a rule before its earning power becomes possible.

The accounting practice of charging interest to construction produces unequal results so far as comparative records are concerned. One concern erects a plant with borrowed money; another concern uses its own capital. Other things being equal, the book records show that one plant costs more than the other. Subsequent depreciation charges of one are more than the other; nevertheless the books merely record the facts. Upon the beginning of operations neither concern showed a loss or a profit; subsequently the operating costs of one are less than the other—as they should be. The benefit is equivalent to a return on the concern's original investment of its own capital.

When questions of **rate-making or public supervision** are in issue, an adjustment of book costs is required. Both concerns should be treated the same. To the book cost of one should be added an amount equal to a fair rate of interest. After the beginning of operations both concerns will then be on the same footing. The allowance for rate-making does not commence until construction is complete or operations begin. If the adjustment is shown in the books (which is not necessary), the corresponding credit is to capital surplus; the income account and rate-making are not affected.

The Interstate Commerce Commission has promulgated this definition:

"Account No. 268, 'Interest During Construction,' should include only such proportion of the interest on funds used for construction purposes and of the discount and expense on funded debt as is equitably assignable to the period between the date of the issuance of securities and the time when the property acquired or the improvement made through such issuance becomes available for the service for which it is intended. The proportion of interest, discount, and expense thus chargeable should be that which the period prior to the completion or coming into service of the facilities or improvements constructed bears to the entire life of the securities issued."

REPAIRS AND DEPRECIATION RESERVE.—Outlays for repairs are chargeable to expense or to depreciation reserve. **Charges to expense** reduce net earnings, **charges to depreciation reserve** do not affect net earnings. The principle underlying the distinction between kinds of repairs is well expressed in Art. 104 of the Federal Income Tax Regulations:

"The cost of incidental repairs which neither materially add to the value of the property nor appreciably prolong its life, but keep it in an ordinarily efficient operating condition, may be deducted as expense, provided the plant or property account is not increased by the amount of such expenditures. Repairs in the nature of replacements, to the extent that they arrest deterioration and appreciably prolong the life of the property, should be charged against the depreciation reserve if such account is kept. . . ."

The tendency of some federal revenue agents is to question **deductions for repairs from income** for income tax purpose on the theory that the usual depreciation allowances include ordinary maintenance. The law permits deductions for maintenance and operation in addition to depreciation. The necessity for allowing both claims is very well expressed in a case in which the court said:

"It will thus be seen that the deductions allowed are to include, not only ordinary and necessary amounts actually paid out in the operation of the property, but also the amounts paid out in the maintenance thereof, and in addition a reasonable sum for depreciation, if any. Now, the operation of a business or property includes payment for labor and materials which go into the actual operation thereof, while maintenance means the upkeep or preserving the condition of the property to be operated, and therefore, in my judgment, includes the cost of ordinary repairs necessary and proper from time to time for that purpose. 'Depreciation,' as used in the statute is not to be confused with ordinary repairs. It is intended to cover the estimated lessening in value of the original property, if any, due to wear and tear, decay, or gradual decline from natural causes, inadequacy, obsolescence, etc., which at some time in the future will require the abandonment or replacement of the property, in spite of ordinary current repairs."

For more detailed specification of **ordinary repairs** as distinguished from **extraordinary repairs,** no authority is more illuminating than the Interstate Commerce Commission classification for telephone companies, in which repairs are defined as follows:

"Repairs, as used in the text of the various operating expense accounts, includes ordinary and extraordinary repairs.

"Ordinary repairs include:

(a) Testing for, locating, and clearing crosses, breaks, grounds, and other line troubles, including routine work intended to prevent such troubles, as, for example, pulling up slack, tightening guys and resetting guy stubs, trimming trees, straightening poles and cross arms, and cleaning and adjusting apparatus;

(b) Replacements of minor or short-lived parts of structures, equipment, or facilities;

(c) Replacements of minor parts of wire plant or equipment made necessary by reason of faulty adjustments, excessive strains, mechanical injuries, or other minor casualties, not provided against in the charge for depreciation of plant and equipment;

(d) Rearrangements and changes in location of plant, except subscribers' station equipment (for which a special account is provided). This includes rearrangements of circuits, reassociation of party lines, rearranging grouping of trunks and calling circuits, recross connecting on distributing frames, rerunning jumper wires, underlining switchboard jacks, etc., together with materials used for such purposes which do not add to the tangible value of such plant;

(e) Recovering salvage and removing retired or abandoned property;

(except subscribers' station equipment) when such costs are not provided for by the depreciation reserve.

"Ordinary repairs are not required to be taken into account in fixing a rate of depreciation.

"Extraordinary repairs include:

(a) Restoring to an efficient or proper condition buildings, structures, or other units of property which have deteriorated;

(b) Substituting, in order to maintain normal efficiency, new parts for old parts of continuous structures, such as pole lines, cables, wires, conduits, etc., where such substitutions do not amount to a practical replacement of any considerable length of such continuous structures;

(c) Restoring the condition of property damaged by storms, floods, fire, or other casualties;

(d) Recovering salvage and removing retired or abandoned property in connection with above work.

"Extraordinary repairs should be provided for by adequate charges to depreciation.

"When it is necessary substantially to reconstruct or to replace a major portion of any unit of property or any important section of a continuous structure, the cost should be handled through the capital accounts; that is, the cost of the property removed or replaced should be credited to the appropriate fixed capital accounts and the new property should be charged thereto.

"All repairs, whether ordinary or extraordinary, should be charged to the appropriate primary operating expense accounts. Extraordinary repairs for which a reserve has been provided should then be concurrently charged to account No. 102, 'Reserve for Accrued Depreciation—Cr.,' and credited to account No. 611, 'Repairs Charged to Reserves—Cr.' "

The above instructions prescribe that both ordinary and extraordinary repairs shall be charged to operating expense. It is further stipulated that extraordinary repairs for which a reserve has been provided should then be concurrently charged to depreciation reserve. The final effect of two entries is that extraordinary repairs for which a reserve has been provided are charged not against income when incurred but to depreciation reserve.

CLASSES OF RESERVE ACCOUNTS.—In a paper read at the annual meeting of the American Institute of Accountants, Chicago, Illinois, September 19, 1922, published in the *Journal of Accountancy* for October, 1922, Mr. H. A. Finney presents a discriminating exposition of the classes and meaning of reserve accounts. In that paper Mr. Finney quotes Mr. Robert H. Montgomery as follows:

"The status of the reserve account is unsatisfactory from the point of view of the professional auditor, chiefly because the term 'reserve' is indiscriminately applied to items which are essentially different."

Mr. Finney continues:

"This essential difference in the nature of various reserves may be shown by three pairs of contrasted illustrations:

"The first pair: When depreciation has reduced the value of a fixed asset, we set up a reserve for depreciation. And when market conditions have increased the realizable value of the same fixed asset, we may set up another reserve for the unrealized profit. Thus one reserve measures the estimated increase in the value of an asset.

"The second pair: A company has capital invested in a mine or other wasting asset. At the close of each period the reserve for depletion is credited with the estimated value of the deposit extracted during the period. This reserve measures a decrease in asset values which has actually taken place in the past and a decrease which is chargeable to the operations of the past. But suppose that a corporation, after providing for all known losses, sets up a reserve for contingencies. This reserve represents a vague and problematical loss; one which has not yet been suffered, which may in fact never be suffered and should certainly not be a charge against the operations of the past.

"The third pair: Taxes are accrued at the end of the period, and a reserve for taxes is set up. This reserve represents a liability, and the offsetting debit records an expense. Contrast this with a reserve for sinking fund, which is not a liability but a part of the surplus. The entry setting up this reserve does not record an expense; it merely records the fact that, because of a contract with the bondholders, a portion of the surplus is temporarily not available for dividends.

"From these illustrations it appears that some reserves are set up because actual expenses or losses have occurred in the past; others are set up because contingent losses may possibly occur in the future; others indicate that profits could be realized by the sale of fixed assets; while others represent neither a profit nor a loss, but a temporary earmarking of a portion of the surplus.

"Some reserves are a part of the surplus; some represent real liabilities; some represent contingent liabilities; some are related to assets, and these asset reserves may show that the property has already decreased in value, or that it may possibly decrease in value at some time in the future, or that it has actually increased in value. Some reserves are set up by charges to profit and loss, some by charges to surplus, and some by charges to asset accounts."

The article by Mr. Finney should be read in its entirety by anyone desiring to study thoroughly the subject of reserves. The following excerpts from his article are enlightening:

"It seems to me that there should be three main groups, with subdivisions, as follows:

I. Profit-and-loss reserves, set up by debits to profit and loss, because some expense, properly chargeable to current operations, has resulted in:
   (a) A decrease in the value of an asset; or
   (b) The creation of a liability.

   (For the sake of emphasis I may say that later in this paper I shall suggest that the term 'reserve' be restricted to accounts of this class, and that other terms be applied to accounts belonging in other classes.)

II. Surplus reserves, representing:
   (a) Conservative provisions for possible future losses, not already incurred; and
   (b) Appropriations of surplus, earmarked as unavailable for dividends because of:
      (1) Contracts with bondholders, other creditors, or preferred stockholders, in relation to sinking funds.
      (2) Action by stockholders or directors intended to limit the payment of dividends for various financial reasons.

III. Reserves for unrealized profits.

"This three-fold classification recognizes that some reserves are set up

because expenses and losses have decreased the net profits; reserves of the second class represent, not deductions from net profit or total surplus, but merely a division of the surplus into two parts: surplus which is available for dividends and surplus which, for the time being at least, is not available for dividends; while reserves of the third class represent unrealized profits which, if put on the books at all, should be kept out of surplus.

"To be a true profit-and-loss reserve, the account must represent a provision for an expense or a loss which has already been incurred and is properly chargeable to current income. It is not necessary that its amount be definitely ascertainable, but there must be a certainty, or at least a high degree of probability, that the loss has actually been incurred as a result of past operations."

Reserve for Contingencies.—"Concerning surplus reserves for contingent losses, I wish to express an opinion on four points:

"First, when a reserve is set up to provide for a loss, the profit-and-loss account should be charged only in case the loss has already been incurred. If the loss is contingent, the charge should be made against surplus. Thus, in closing the books at the end of 1921, a reserve for possible losses in inventories due to any market declines which may take place in 1922 should not be charged against current profits of 1921, because the loss has not yet occurred, it may never occur, and if it does occur it will be a loss of 1922. If a reserve for accidents is being set up at the end of 1921 because future accidents may result in liabilities, this reserve should be a charge against surplus.

"I am willing to go so far as to say that a reserve for fire loss, in case of self-insurance, should be created out of surplus and not out of current income. It may sound radical to say that profit and loss should not be charged when the reserve for insurance is credited, and I am not sure that I would have the temerity to make the assertion if I were not supported by the good authority of Mr. Dickinson, who places the 'provision for insurance against future possible losses from fire and other insurable risks' among the 'mere allocations of surplus.' Moreover, it seems to be a position which can be logically defended. Profit and loss ought not to be charged unless a loss has already occurred. The amount may not be ascertainable, but it must have occurred before profit and loss can properly be charged, and it must have been the result of past operations. Now a loss cannot occur without reducing the value of an asset or creating a liability; and conversely, if the assets have not been reduced in value and if a liability has not been created, there can have been no loss. This seems to be the case when a reserve for fire loss is set up. Until the fire occurs, the assets are still in existence; the net worth has not diminished; there has been no loss which is properly chargeable against operations (even assuming that a fire loss is an operating expense), and the reserve is a part of the surplus. It may be argued that where available experience figures are adequate to furnish a trustworthy estimate of the future loss, a periodical charge should be made to operations to equalize this loss in order to maintain uniformity. The answer to that argument seems to be that an appearance of uniformity is not desirable when there is no real uniformity.

"The second thing I wish to say in regard to surplus reserves for future contingencies is that if a loss does occur it should be charged against the reserve only in case it is an extraneous loss, and that if it is an operating loss it should be charged to profit and loss regardless of the existence of the reserve.

"To illustrate, assume that a reserve is set up at the end of 1921 for possible losses on inventories from market declines which may take place in 1922. If the loss occurs it should be dealt with as other operating expenses are dealt

with and should be reflected in the profit-and-loss account for 1922. Unless the reserve is needed for other possible losses, it should be returned intact to surplus. But if a reserve has been set up for fire losses, the reserve may properly be charged in the event of a fire. A fire loss is extraneous to operations; it is a proper charge to surplus, and the reserve for fire loss is merely a portion of the surplus set apart and retained for the purpose of absorbing such losses.

"The third thing I wish to say is that, since such reserves are in reality surplus, they should be called surplus, although the title of the account should indicate that it represents surplus reserved or withheld from dividends in order to avoid a deficit in the event of some specified loss. I suggest such titles as 'surplus reserved for contingent fire loss,' 'surplus reserved for contingent accident loss' and 'surplus reserved for contingent inventory loss.'

"The fourth thing is that these accounts should appear in the balance-sheet as a part of the surplus. Thus in the balance-sheet we might have:

Surplus:

Reserved for contingent fire loss	$25,000.00
Reserved for contingent inventory loss	10,000.00
Total surplus not available for dividends	35,000.00
Free and available for dividends	60,000.00
Total surplus	$95,000.00

Surplus reserves are "those which are appropriations of surplus, not intended as provisions for contingent losses but designated as not available for dividends because of a contract with bondholders or stockholders or because of some financial policy of the management. In this class we find the reserve for sinking fund, the reserve for working capital and the reserve for extension of plant."

Unrealized Profit Reserves.—"Finally, we come to the third main class of reserves: accounts which are set up because fixed assets have increased in market value and because the write-up ought not to be carried into surplus. For these accounts I suggest the title 'unrealized increment.' For instance, 'unrealized increment in land value' or 'unrealized increment in plant value.' Thus we would get away from one more use of the term 'reserve,' and the term 'unrealized profit' is self-contradictory. If the increase in value is unrealized it cannot be a profit.

"Some might say, Credit capital surplus. In my opinion the word 'surplus' should not appear in the title of an account unless that account contains real surplus, either appropriated for some reason or free for dividends. Let the surplus account contain operating profits, and let the capital-surplus account contain extraneous additions to surplus which, though not arising from operations, are nevertheless realized and legally available for dividends.

"Others may say, Keep the increase in market value off the books. This has often been said, but it seems to me that it is not necessary. It is only necessary to make sure that the corporation does not credit the increase to surplus and incur the risks of using this credit for dividends. If the credit is passed to an unrealized increment account, clearly understood to be unavailable for dividends, and so shown on the balance-sheet, I see no objection to allowing the corporation to show the present value of its fixed property."

PROFIT REDUCTIONS VS. PROFIT DISPOSITIONS.—Is **interest on bonds** to be deducted from income in arriving at net income, or is it a distribution of net income? This question is of the utmost importance because the income statements of corporations cannot be judged in their true relation to invested capital unless the reader of the statement understands the distinction thus

raised and takes pains to examine the statement with that in mind. The practice on this point is not uniform. The **income tax acts** of the federal government allow the deduction of interest paid in ascertaining net income subject to tax. The **Interstate Commerce Commission** likewise classifies interest on indebtedness as a deduction from gross income in determining net income. Interest on debt is a fixed charge unlike dividends which are declared at the discretion of the directors. Some corporations adhere to a contrary principle. The consolidated income statement of the U. S. Steel Corporation reaches a figure described as "net income in the year" before deduction of interest paid on bonds of the parent corporation. Interest on bonds of subsidiary companies apparently is deducted before reaching a figure for net income. The Consolidated Gas Co. of New York reports in its annual statement a figure for net earnings which is stated before deduction of interest on funded and unfunded debt.

PROFITS VS. CAPITAL LOSS AND GAIN.—On this Arthur Lowes Dickinson has written the following in "Accounting Practice and Procedure," in which profit and loss is used in the sense of capital loss and gain, which is the term employed in this section:

"There is a tendency to omit from the account which shows the balance of the year and charge to the account of undivided profits items of a special character or even of an ordinary character which may belong properly to a previous period. As the practice of charging to Profit and Loss in preference to income is to be deprecated, unless in exceptional cases, it may be well to state generally what items may properly be so charged, with the inference that everything which does not come within this classification should go to either Income account or Net Income account. Proper charges or credits to Profit and Loss may be defined as follows:

"1. Extraordinary items of receipt or expense not applicable to any particular year, such as profits realized on sales of property, or losses on sales or dismantlement of property, or due to its reconstruction. The loss in this class of cases is closely related to the renewal or depreciation charges on the same property, which should properly go to the operations of a particular year. Frequently a property is abandoned for purposes of reconstruction, which, if it had not been for such reconstruction, would have remained in service for a long period to come and have been maintained in a perfectly efficient condition at a small fraction only of the loss caused by its abandonment. In such cases it would seem that the proper distribution of the charges between the Income account and Profit and Loss account should be to charge to the Income account so much of the difference between the original cost and the value at the time of abandonment as has not already been provided for through charges to income for depreciation, and to charge the balance—namely, the difference between the depreciated value at the time of abandonment and the scrap value realized —to Profit and Loss account. This is a principle fairly easy of application, which might well be adopted universally.

"2. Discounts and premiums on bonds. Discounts and premiums on bonds are in effect an addition to or deduction from the interest rate paid on the bonds over their life, and as such should strictly be included with interest charges in the net income account by proper instalments each year. In practice, however, it is frequently desired to write off the whole of the discount at as early a date as possible, in preference to carrying it as a deferred and unrealizable asset for a long period of years; no objection can be raised in such a case to providing for the full amount out of the surplus earnings of previous years. It must, however, be remembered that such a course conceals the true rate of

interest paid on borrowed money, the latter being a factor of great importance in forming an opinion on the financial condition.

"On the other hand, ordinary earnings and expenses of previous years omitted therefrom either by mistake or because they were at that time incapable of ascertainment, should invariably be included in Income account and never in Profit and Loss account. To include them in the latter would preclude that account from disclosing over a period of years the true result of that period; and if in one year charges or credits have been understated it necessarily follows that in some other year they must have been correspondingly overstated."

The **Interstate Commerce Commission classifications** prescribe that debits of the following character, among others, shall not be classed as deductions in arriving at net income:

Stock discount extinguished through surplus.
Debt discount extinguished through surplus.
Losses on property and equipment abandoned, sold or otherwise retired.
Relatively large delayed debits relating to revenue and expense of previous fiscal periods.
Adjustments or cancellations of balance sheet accounts.
Losses or deficits not properly chargeable to income, such as uncollectible bills for which no reserve has been provided.
Losses resulting from the sale of investment securities.
Payments of old accounts previously written off.

The Interstate Commerce Commission further prescribes that credits of the following character, among others, shall not be classed as income in arriving at net income:

Profit on property and equipment sold.
Relatively large delayed credits relating to revenue and expenses of previous fiscal periods.
Donations received.
Adjustments or cancellations of balance sheet accounts.
Profit derived from the sale of investment securities.
Collections of old accounts previously written off.

UNREALIZED APPRECIATION.—The treatment of unrealized appreciation is discussed under the head of "Classes of Reserve Accounts" on page 1326. Unrealized appreciation is so often included in surplus, or described as a part of surplus, that it is so classified in the chart on page 1316. Under certain conditions there may be legal justification for including unrealized appreciation in unappropriated surplus account.

CLASSES OF SURPLUS.—The separation of surplus into accounts which disclose its composition frequently affords information of great importance to those who use balance sheets. Consolidation of the surplus accounts is sometimes resorted to when there is a desire to conceal material changes in financial condition. **Good accounting practice** requires proper segregation and does not sanction the consolidation of surplus accounts when such action tends to make a balance sheet less understandable.

Accretions to capital arising from reappraisals, from sales of capital assets, from gifts, from premiums on capital stock, etc., are known as **capital surplus.** When the amounts are substantial, separate accounts for each should be shown. The excess of the book value of assets over liabilities and capital stock at the time of incorporation is known as **paid-in surplus.** Subsequent contributions by stockholders, in cash or property, when additional capital stock is not issued, are also a part of paid-in surplus. Accretions to capital from earnings con-

stitute **"earned" surplus;** earnings which corporations agree to set aside as not available for current dividends are known as **"appropriated" surplus.**

The term **"undivided profits"** usually refers to the balance of current net income not transferred to surplus account in the books. There is no actual difference between the terms "earned surplus" and "undivided profits," except in the case of national and state banks and trust companies, which make a distinction between surplus and undivided profits; the amounts which are definitely transferred to surplus are treated as additional capital, and are not available for dividends.

Surplus, in the balance sheet, should be divided into three general groups:

1. Capital surplus
2. Appropriated surplus
3. Surplus

The first and third groups are self-explanatory. It is important, however, to ascertain that capital surplus is not diminished by operating losses, nor by dividends, unless the dividends have specifically been declared from capital. Any changes in capital surplus during a fiscal period should be shown in detail in the balance sheet or in accompanying schedules. This precaution is of unusual importance when no-par value stock appears in a balance sheet.

It is not necessary to credit the **profit from the sale of capital assets** to capital surplus. It is true that earned surplus should represent net income derived from the normal operations of a business; but profits realized from extraordinary sources are not true capital surplus. Capital surplus arises from contributions by the owners of a business; profits arising from any subsequent dealings with the public are not in the same class. It has been said that when treasury stock is purchased at a discount, paid-in or capital surplus should be credited with the discount. This is a fallacy since there has been no new contribution of capital. One of the owners surrenders his interest for less than its book value and the remaining owners have a greater relative interest in book values than before the purchase; but the actual result is an appraisal of book values at less than face value. The transaction is not one which justifies writing up any surplus account.

There is little net or final difference between the profit arising from the sale of normal product and from the sale of surplus plant. Plant or property accounts may have been excessively depreciated so that apparent profits realized from sales do not represent actual net profits. When capital assets disposed of at a profit are to be replaced, it is not expedient (although it is not improper accounting practice) to credit the profits to earned surplus, since the gross proceeds of the sale presumably will have to be used in making the replacements. Under such circumstances the profits should be credited to special surplus or to replacement accounts and not made available for cash dividends. It may be said, therefore, that profits arising from sales of capital assets are capital or special surplus or earned surplus, depending on the disposition of the proceeds.

There is no real distinction between capital surplus and paid-in surplus. The latter term appears in excess profits tax procedure as a convenient term to describe capital surplus arising from specific sources. The term should not otherwise be used. As stated elsewhere, surplus may be divided or appropriated by contracts with creditors or other outsiders or by action of boards of directors. So far as balance sheets are concerned there need be only two groupings: One to represent capital or appropriated surplus; the other free or earned surplus.

Capital surplus and earned surplus are terms frequently used in **tax laws and regulations.** In general, tax procedure should follow good accounting practice,

except when tax laws are specific in departure therefrom. When tax laws do not define capital and income, good accounting practice governs.

The second group of surplus, **appropriated surplus,** should be divided into as many separate accounts as are necessary to show clearly all compulsory and voluntary segregations. As to **compulsory segregation,** we find the following reserves for retirement of securities:

(a) Reserves for retiring bonds, notes, etc.
(b) Reserves for retiring preferred stock.

As to **voluntary segregation** we find:

(a) Reserves for working capital.
(b) Reserves for dividends.

CURRENT ASSETS.—The **segregation of current assets** assumes the utmost importance in the minds of creditors who lend on the basis of statements submitted to them and of bankers who negotiate the terms of preferred stock provisions and bond indentures. Notwithstanding the wide use of the term "current assets" in business and financial circles, there is **no authoritative definition.** The Federal Reserve Board, as far as is known, has not formulated a definition of current assets. It is believed that the Federal Reserve banks classify current assets in balance sheets of industrial corporations somewhat differently than do the commercial banks. A definition of current assets which might satisfy lenders on commercial paper would differ from many **definitions in preferred stock provisions and bond indentures** in which the terms have so often been agreed to only after negotiation and compromise. There is a tendency, however, on the part of lawyers who draw the agreements, to insert, in lieu of an attempted definition of current assets, a clause to the effect that current assets shall be as determined in accordance with good accounting practice by a certified public accountant appointed by the corporation subject to the approval of the registrar or bond trustee.

A definition of current assets has been reported by a committee of the American Institute of Accountants and was published in the bulletin of that organization for May 15, 1924. That **definition** is as follows:

"Current assets have been defined as cash, receivables from outsiders, and inventories of stock in trade, which in the regular course of business will be readily and quickly realized, together with such additional assets as may readily be converted into cash without impairing a business or enterprise (e.g., marketable securities other than those held for purposes of control, notes or accounts receivable from officers, stockholders or employees)."

The committee adds that "in practice it is usual in the case of a manufacturing concern to include the working assets, such as supplies, under the general caption of 'current assets.'"

The above definition expresses the rule as commonly understood to govern the classification of current assets on balance sheets submitted to noteholders. A definition **of current assets for a preferred stock agreement** is given as follows:

"Current Assets" shall include:

(a) Cash on hand and in bank, including cash in the sinking fund; good and collectible notes, accounts, bills, and trade acceptances receivable, including accrued interest and rents and royalties receivable, but not including receivables representing advances made to finance the acquisition of fixed assets; and prepaid insurance, interest, and taxes, and other prepayments.

(b) Manufactured products; products in process of manufacture, and materials and supplies, such products, materials, and supplies to be valued on the basis of actual cost, or market value, whichever is lower.
(c) Bonds of the United States government at not exceeding their market value.
(d) Certificates of indebtedness of the United States government at not exceeding their par value.
(e) Other readily marketable securities paying regular interest or dividends, valued at not more than the market value thereof (excluding bonds or stocks issued by the company or by a constituent company, or issued by a corporation of which the company or constituent company shall at the time own or control, directly or indirectly, a majority of the capital stock).

This definition admits **prepayments;** that of the American Institute of Accountants does not. In that respect the Institute definition is carelessly drawn and is inaccurate. The prepayment of January rent on December 31 is as much of a current asset as if the payment were not made until January 20 and an equivalent amount of cash were included in the balance sheet of December 31. It would also have been a better definition if the expected time of realization of the various items were limited to one year.

In **conveyance clauses of bond indentures** the specifications of properties subject to mortgage involve agreement as to current assets that shall be excluded from the encumbrance. It is not easy to distinguish in brief language between kinds of apparatus, implements, tools and supplies. Some may be current assets; some may be fixed. The word **"supplies"** is too indefinite to serve as an unmistakable line of demarcation between current assets and fixed assets. The properties mortgaged must be specified with particularity to avoid misconstruction.

CURRENT LIABILITIES.—The provisions in a **preferred stock agreement** give the following definition of "current liabilities":

" 'Current Liabilities' shall include: accounts, bills, notes, and acceptances payable, maturing within one year after their date; loans from banks and bankers; salaries, wages, interest, rents, royalties, and taxes accrued, including income and excess profits taxes."

SUPPLEMENTARY ACCOUNTS.—Supplementary accounts as the term is used here are those which may be kept during a corporation's fiscal year but usually are closed out before finally closing, so that they do not ordinarily appear in the balance sheet or statement of income and expense. Typical examples of accounts of this class are described below.

Suspense Accounts.—A **suspense debit account** is charged with items that cannot be otherwise classified until additional information is received. A **suspense credit account** has its origin likewise in transactions the ultimate classification of which is for the time being both indeterminate and uncertain. An **example of a suspense debit** is the cost of tentative or preliminary surveys, designs, and investigations made for determining the feasibility of projects under contemplation, which may thereafter be definitely undertaken or abandoned. The former disposition would determine the cost to be a charge to a permanent asset account; the latter would fix it as a charge to an expense account. An **example of a suspense credit** is the receipt of money under a lease-purchase contract by the terms of which property will be conveyed only upon completion of payments over a stated period, so that it is indeterminable,

at the time instalment monies are received, whether they shall ultimately be applied as sales of property to be divided between cost of property disposed of and gain or loss, or whether they shall be wholly income.

Suspense accounts should not be used as a repository for transactions the classification of which is determinable at the time. Suspense items like the examples just given cannot always be cleared by the end of the fiscal year, but many suspense accounts can be disposed of, or at least given their probable classification, in the annual balance sheet or statement of income and expense.

Clearing Accounts.—In the terminology of the Uniform System of Accounts for Telephone Companies as prescribed by the Interstate Commerce Commission, clearing accounts "are provided for certain expenses which usually affect several classes of operations but need to be brought together in one account in order that the total of the expenses may be known and properly distributed." The **sub-accounts** of this group, with the **bases of clearance** prescribed by the Interstate Commerce Commission, are these:

Shop expense—should be cleared by apportioning the total amount of the expenses to the various jobs on an equitable basis.

Stable and garage expense—should be apportioned to the proper accounts according to use, or the debits to the expense accounts may be made at rates per hour of service which distribute the total expense equitably.

Tool expense—should be cleared by adding to the expense of repairs and cost of plant installed such amounts as will equitably distribute the total expense for tools.

Supply expense—should be cleared by adding to the cost of materials and supplies passing through stores a suitable loading charge which will equitably distribute the total cost of conducting the stores and by adding to the cost of such supplies as are bought by the purchasing department a pro rata share of the total expense for the purchasing department.

Engineering expense—should be cleared by apportioning the total expenses to operating expenses and fixed capital accounts on the basis of service rendered, as determined by the actual time devoted to particular jobs or on an equitable basis fixed by the officers of the company.

Plant supervision expense—should be cleared by charging directly to the appropriate accounts such expenses as can be allocated to particular pieces of work and by charging out the balance on the basis of labor employed in all construction or maintenance work in progress.

House service expense—should be cleared by apportioning the entire expense to the operating expenses of other accounts on basis of the use made of such property.

Clearing accounts should be cleared during the fiscal year so that balances will not appear in them at the end of the year.

Apportionment Accounts.—The purpose of an apportionment account is similar to that of clearing accounts. An example is "steam generated apportionment account" which is defined in the Uniform Classification of Accounts for Electrical Utilities (November 1922) in this language:

"This account will be raised only by companies operating, in connection with electric utilities, other utilities or departments which make demand upon the same boiler plant.

"Where a demand of this character is made upon a boiler plant, the expenses incident to generating steam shall be transferred from the foregoing accounts to this account at the close of the period. The total cost of generating steam

as then shown shall be apportioned to the utilities or departments using the steam, by credits to this account. The balance remaining in this account will represent the cost of steam for generating electric energy."

A general instruction in the classification just referred to is that charges to operating accounts and credits to apportionment accounts "should, unless there is some good reason to the contrary, be so distributed that the costs for any one year will be absorbed by the transactions occurring during that year."

Equalization Accounts.—The Interstate Commerce Commission issued instructions in April, 1921, defining equalization accounts for steam roads. The following is quoted from those instructions:

"When carriers adopt a budget or estimate of expenditures for maintenance of fixed improvements or equipment for the year, such authorized estimates may be equalized by division into twelve equal parts, if for a full year, or into a number of equal parts corresponding to the number of months remaining in the year after the adoption of the maintenance program. If advantage is taken of the optional accounting prescribed in this section, the appropriate primary accounts chargeable with the actual expenditures and the equalization account combined shall contain, each month, amounts aggregating one of such equal parts.

"The equalization accounts are provided in order that their use may show, for each month, the adjustment necessary between actual expenditures included in the other primary accounts and the equal monthly proportion of the estimated or authorized maintenance expenses for the period."

The purpose of equalization accounts is to **distribute maintenance expenses evenly** through the months of the fiscal year. The rule of the Interstate Commerce Commission is that equalization reserve accounts "shall be closed annually unless at the close of the year a credit balance remains therein due to the non-completion of maintenance work because of adverse labor conditions, non-receipt of material or similar reasons, in which case such part of the balance as applicable to unfinished work may be carried over to the following year."

Overhead Burden.—In cost accounting, an overhead burden account is credited with the amounts of overhead expenses that are distributed to operating departments or to costs of production. There should be no balance in this account after the books are finally closed at the end of the fiscal year.

Estimated Costs of Processes.—In cost accounting it is common to credit to a special account, bearing such title as "cost of completed process," the amounts assigned in lieu of actual costs. This type of account is employed for such processes as heat treating, nickel plating, and the like, where actual costs of separate parts are indeterminate and amounts are assigned thereto on the basis of estimated or standard costs. Comparison of the total credits to this account with the total actual costs of labor, supplies and departmental expense over a period, proves whether the estimated or standard costs in the aggregate are too high or too low.

Such accounts are not dissimilar to the credit account "production expenses transferred," which is defined in the Uniform Classification of Accounts for Gas Utilities (November 1922) in these words:

"This account shall include such part of the accounting company's cost of producing gas as is properly chargeable to another co-ordinate department, as, for example, an electric railroad or an electric light and power department."

Fundamental Principles of Valuation

BALANCE SHEET AND INCOME STATEMENT.—The balance sheet of a going concern is founded on the **amounts of capital invested in the enterprise,** as augmented by undivided profits. That is the accepted basis of valuation implicit in the balance sheet. The balance sheet does not purport to show the value of the company's capital stock. There is no relation between capital and surplus on the balance sheet and the market value of the stock.

A principle underlying a true **statement of income and expense** is that earnings taken into account shall have been **actually realized.** With few exceptions there is unanimity of practice on this point. Opinion and practice are divided, however, regarding the provision that ought to be made for losses in statements of income and expense. Industrial corporations are more conservative in this respect than the Congress and public utilities. Industrial corporations generally are disposed to make ample provisions in their statements of income and expense for losses foreseen as likely to occur, whether actually sustained or not. The federal income tax statute permits deductions for "losses sustained during the taxable year." An exception in the statute is that the taxpayer may deduct, "in the discretion of the Commissioner, a reasonable addition to a reserve for bad debts." Public utilities postpone still further the provision for losses, as evidenced by their definition of "property abandoned" account, as provided in the Uniform Classification of Accounts for Electrical and Gas Utilities, which is:

"This account is intended as a suspense account which shall include the retirement loss (i.e., the original cost, estimated if not known, plus cost of dismantling, less salvage) on property destroyed or abandoned because of replacement, of obsolescence, of an extraordinary casualty, or for any other reason, when such loss has not been provided for in advance through a reserve. Amounts thus charged should be amortized through annual or more frequent charges over a definitely determined period to such accounts as shall be proper."

The Classification of Accounts for Steam Roads permits forward amortization of losses sustained on approval by the Interstate Commerce Commission.

VALUATION OF FIXED ASSETS.—The principle of valuation of fixed assets as generally accepted by industrial corporations is the same as that which is clearly defined in the Uniform Classification of Accounts for Electrical Utilities (November 1922):

"All charges to fixed capital accounts shall be at the actual cost of the property acquired, at the time of its acquisition. A bona fide contract or agreement of purchase and sale between entirely separate parties shall be prima facie evidence of actual cost. Each item of property shall be carried in the fixed capital accounts at no more, and no less, than its actual cost unless, or until, such property is abandoned, replaced, reconstructed, or converted. . . . The term 'cost' includes not only the cost of labor, material and supplies directly employed or consumed in the construction and installation of fixed capital, but also the cost of preliminary plans and surveys and such portion of the expenses for engineering and plant supervision and of general expenses as may be chargeable to the fixed capital accounts under an equitable plan for apportionment of such expenses."

PROFITS ON COMPANY'S OWN CONSTRUCTION.—Such profits ought not to be taken into the income and expense statement. Arthur Lowes Dickinson comments as follows: "Managers of the operating departments of a factory frequently claim that they should be allowed to charge a profit on construction

work carried out for their own mills, on the ground that if the work were done outside, they would have to pay a profit, and at the same time would set free their own facilities to carry out additional work at a profit for outside customers; and they even go so far as to say that, if they can not charge a profit on construction work so carried out, they will in future have the work done by outside contractors. . . .

"There is here a **confusion between a profit and a saving.** The reason that a concern undertakes its own construction work in place of letting outside contracts therefor, is that it can by that means effect a saving in its expenditure by taking advantage of its own capital and facilities to carry out the work, instead of using the organization and the capital of others, upon which it would have to pay a profit. The saving so effected is of considerable advantage, in that it reduces the amount of capital invested, and future earnings will represent a larger return on the investment. Moreover, it is seldom true in a well-managed going concern that the use of its facilities for construction expenditure involves giving up profitable work for outsiders, which would otherwise have been undertaken; the situation will have been foreseen and arrangements made so that its organization may, almost automatically, expand sufficiently to provide for any increase in its operations which is likely to be thrown upon it. In the contrary case it would be difficult to find justification for increasing costs of construction because of the lack of foresight of the management. Moreover, if a sum be added to the cost of construction and credited to Income account, to represent the profit which would have been earned by the company if the work had been done for outsiders instead of for itself, this profit can only be made available for distribution by increasing the amount of capital contributed for new construction work; and it can hardly be considered good financial policy to increase indebtedness or take in new partners merely for the purpose of paying dividends. The only sound principle that can be adopted is to charge to construction all costs and expenses which are directly attributable to that construction, together with a fair and moderate proportion of necessary indirect expenses and of interest actually paid, but no further amount to represent profit.

"In England the Companies (Consolidation) Act, 1908, now provides that when any shares of a company are issued to provide money for construction purposes, the company may, subject to certain regulations and to the approval of the Board of Trade (a government department), pay interest on such shares to the stockholders at a rate not exceeding 4% per annum during the construction period; and that the interest so paid may be added to and form part of the cost of construction. This provision does not permit of the addition to construction cost of any interest which is not actually paid out in cash.

"If an asset is created by construction without including in the charge all the elements which an outside contractor would charge, the value based upon market prices will clearly be low. The saving so effected is of undoubted benefit, in that less capital has been employed upon which profit has to be earned, but the asset value is understated. On the ground already stated that no profits should be made out of construction, this difference in value cannot be considered as a profit arising out of operations; but there can be no objection to treating it as surplus appropriated to capital purposes, provided always that the total book value of all assets together is not in excess of actual value."

REVALUATIONS OF FIXED ASSETS.—Capital assets should be **carried at cost** unless and until some change occurs which justifies a revaluation. In a going business, the ownership or control of which does not change, revaluations may be made at any time provided the changes between original costs and

revaluations are clearly shown. When **appraisals** are made in which **appreciation** is included, there is no objection to setting up appraised values in balance sheets, provided the valuation is qualified by an explanation and provided the excess of the appraisal above book value is **credited to special or capital surplus** and is not merged in earned surplus. This practice is not permissible, however, under an agreement with creditors in which fixed assets are mentioned but are not specifically defined. It would be deemed to be a breach of such an agreement if book values as stated at the date of the agreement are increased, except for actual additions to property.

VALUATION OF SECURITIES OWNED.—The distinction between **permanent investments** and **marketable investments,** according to Mr. Dickinson, is that "the former cannot be sold without in some way affecting the activities of the owner, while the latter representing merely the temporary deposit of surplus working capital can be disposed of at any time without in any way affecting such activities. The distinction is a most important one and has an equally important bearing on the financial position of an undertaking by reason of the fact that the investment in the former class of a portion of the current assets withdraws those assets from the general use of the business and prevents their use for the purpose for which current assets are intended, namely, the conversion as rapidly as may be from cash into products for sale and so back into cash again. The conversion of any part into assets of a permanent nature diminishes the current assets and can only be offset either by reducing operations or increasing liabilities, unless the current assets are in the first instance more than sufficient for all needs. If permanent investments are included in current assets, it is impossible to get a clear view of the facts."

Permanent investments are usually **carried in the balance sheet at cost.** Effect should be given, however, to any reduction in value which may be judged permanent. The Interstate Commerce Commission allows a company "the option of carrying its investments in securities other than those issued or assumed by it either at cost or at a reasonable valuation other than cost."

VALUATION OF INVENTORIES.—"Sound commercial principles require that no credit be taken for profits until they are realized; but further, that if there is any possibility that what remains unsold may not realize its cost, a proportion of the realized profits on sales which have been made, should be carried forward to cover these possible losses. It is accordingly generally recognized as a correct accounting principle that if the cost value of the inventory exceeds the market value, **a reserve** should be created to bring it down to the latter value, while, on the other hand, if the market value exceeds the cost, no credit should be taken for the profits until they are realized by an actual sale.

"The above is in substance an exposition of the familiar phrase of **'cost or market, whichever is lower.'** This principle has been adopted in the regulations of the Treasury Department in administration of the federal income tax. The Treasury Department also permits valuation of inventories at cost, but the taxpayer must adhere to one method or the other. It is the accepted practice—and this has been made the regulation by the Treasury Department—that the principle of 'cost or market, whichever is lower' shall be applied to each item of the inventory, not to the sum total of the inventory." (Arthur Lowes Dickinson.)

Inventory valuations should not include **interdepartmental or intercompany profits.** In the case of large enterprises where the article which is finally sold to the public passes through several departments or through several companies whose assets will be included in a final balance sheet, it is very important that

any profits which have been included in their figures by the departments or companies when billing the product to other departments or companies, should be eliminated from the inventory prices. If it is not possible to get such actual profit figures, an **estimated reserve** should be provided, based on the best information obtainable to exclude the approximate amount of profits in sales price which has accrued to the department or subsidiary selling the same or furnishing service in connection therewith.

VALUATION AND RECOGNITION OF LIABILITIES.—Every direct liability should be acknowledged on the books as of the date when the liability is incurred. That is the main principle. It holds even though the precise amount of the liability may not be determinable as soon as the existence of the liability becomes known; if indeterminate in amount, the liability should be expressed in the books for the time being at an estimated figure.

Accrued liabilities are accurately defined in the Classification of Accounts for Electrical Utilities (November 1922):

"Accrued liabilities are those not yet due, but which are to become due in the near future and which accrue or grow from day to day, such as unmatured interest, rents, taxes, etc. Credits to accounts representing accrued liabilities whose amounts are not definitely known, as in the case of many taxes, are made on the basis of estimates which are adjusted when the proper amounts become known."

The federal income tax accrues as the earnings accrue. A corporation going out of business before the end of the taxable year is nevertheless liable for tax on the income earned during any part of the year.

"In close connection with the subject of inventory valuation is that of proper provision for all liabilities in respect of the commodities included in the inventory, and on the other hand, for the proper inclusion in the inventory of all commodities for which liabilities have been taken up. Commodities may frequently have been delivered for which no bills have yet been rendered; and on the other hand, they may be in transit from the point of shipment and only received subsequently to the enumeration, while the bills, by the terms of shipment or to take advantage of discount, may have been rendered and paid prior to that date. A similar condition may arise also with sales which may for one reason or another have been billed to the customer while the goods are still on hand. Any good accounting system should provide for such conditions automatically . . . serious errors in balance sheets and profits may easily arise through neglect of proper precautions to guard against such omissions." (Arthur Lowes Dickinson, in "Accounting Practice and Procedure.")

PURCHASE COMMITMENTS.—"In some businesses purchase commitments are represented in the accounts, in many they are not. The reason for the variance in practice may be explained as follows. As long as such contracts are **made in the ordinary course of business** for the purpose of supplying its actual needs as they accrue, no question need be raised in connection with a balance sheet as of a date prior to the date of delivery. In many concerns, however, these future contracts **form a business in themselves,** being made either as a simple speculation or to protect legitimate dealings in a highly speculative market. Such contracts must be taken into consideration in the preparation of the balance sheet, and the losses shown by a comparison between the contract price and the market price for similar future deliveries at the date of the balance sheet provided for. The differences on such contracts may amount to very large sums, and their omission from the balance sheet would give a most misleading view of the position. This condition usually applies only to those classes of commodities which are dealt in on produce exchanges

and in which there is a free market for contracts in future deliveries; and for the proper ascertainment of the profits or losses a thorough knowledge of the methods and rules of the exchanges is essential." (A. L. Dickinson.)

An industrial concern not dealing in future contracts would not take outstanding purchase commitments on its books of account because the direct liability does not arise unless the vendor delivers the goods.

CONTINGENT ASSETS AND LIABILITIES.—Special instructions in the Interstate Commerce Commission Classification of Accounts for Steam Roads prescribe the following treatment of contingent assets and liabilities:

"Contingent assets and liabilities shall not be included in the body of the balance sheet statement, but shall be shown in detail in a supplementary statement accompanying the balance sheet statement. Contingent assets are those without value to the accounting company until the fulfillment of conditions regarded as uncertain. Contingent liabilities include items which may, under certain conditions, become obligations of the company, but are neither direct nor assumed obligations on the date of the balance sheet."

Books of Account

ECONOMY AND SIMPLICITY IN BOOKKEEPING.—Considerations of economy and simplicity, which determine many of the methods of bookkeeping, have given rise to the following principles:

1. The **classification of accounts** should be kept as nearly uniform as possible from year to year so that comparisons may be had without analysis and rearrangement of the accounts. This principle, however, should not deter any progressive organization from instituting improved methods or modifying its accounting structure to correspond with expansion of business.
2. The aim should be to keep few rather than many **accounts in the general ledger** so that they will exhibit as compact a view as can be had of assets, liabilities, income, expenses, capital losses, capital gains, and profit and surplus disposition.
3. The classification of accounts in the general ledger, compressed though it should be, ought not to include any **mixed account;** that is, an account, the balance of which is composed of diverse elements so that it has to be subdivided on the financial statements.
4. The classification of accounts should be **articulated with the financial statements** so that balances in the ledger accounts may be drawn off and entered in the financial statements in the same sequence and without further subdivision or consolidation of items.
5. For convenience and certainty of identification and to save time in the writing of cross references in the books of entry and supporting papers, the accounts should be assigned **code numbers.**

STEAM RAILROAD CLASSIFICATION OF ACCOUNTS.—The Interstate Commerce Commission Chart of Accounts for Steam Roads is an example of a classification which fulfills the above requisites. The present classification has been in vogue since 1914. A steam railroad has as many kinds of operations and transactions as any corporation could possibly have; yet the list of **primary accounts** does not contain relatively a large number of accounts because of the care with which the classification has been designed. Since it provides for all sorts of operations and transactions, it serves as an excellent

guide for the construction of classifications for other lines of business. It is, therefore, reproduced here.

STEAM RAILROAD CLASSIFICATION PRESCRIBED BY INTERSTATE COMMERCE COMMISSION

Primary Accounts for General Balance Sheet

DEBITS.

701. Investment in road and equipment
702. Improvements on leased railway property
703. Sinking funds
704. Deposits in lieu of mortgaged property sold
705. Miscellaneous physical property
706. Investments in affiliated companies
707. Other investments
708. Cash
709. Demand loans and deposits
710. Time drafts and deposits
711. Special deposits
712. Loans and bills receivable
713. Traffic and car-service balances receivable
714. Net balance receivable from agents and conductors
715. Miscellaneous accounts receivable
716. Material and supplies
717. Interest and dividends receivable
718. Rents receivable
719. Other current assets
720. Working fund advances
721. Insurance and other funds
722. Other deferred assets
723. Rents and insurance premiums paid in advance
724. Discount on capital stock
725. Discount on funded debt
726. Property abandoned chargeable to Operating Expenses
727. Other unadjusted debits
728. Securities issued or assumed—Unpledged
729. Securities issued or assumed—Pledged

CREDITS:

751. Capital stock
752. Stock liability for conversion
753. Premium on capital stock
754. Grants in aid of construction
755. Funded debt unmatured
756. Receiver's certificates
757. Non-negotiable debt to affiliated companies
758. Loans and bills payable
759. Traffic and car-service balances payable
760. Audited accounts and wages payable
761. Miscellaneous accounts payable
762. Interest matured unpaid
763. Dividends matured unpaid
764. Funded debt matured unpaid

765. Unmatured dividends declared
766. Unmatured interest accrued
767. Unmatured rents accrued
768. Other current liabilities
769. Liability for provident funds
770. Other deferred liabilities
771. Tax liability
772. Premium on funded debt
773. Insurance and casualty reserves
774. Operating reserves
775. Accrued depreciation—Road
776. Accrued depreciation—Equipment
777. Accrued depreciation—Miscellaneous physical property
778. Other unadjusted credits
779. Additions to property through income and surplus
780. Funded debt retired through income and surplus
781. Sinking fund reserves
782. Miscellaneous fund reserves
783. Appropriated surplus not specifically invested
784. Profit and loss—Balance

Primary Income Accounts

I. CREDITS:

501. Railway operating revenues
502. Revenues from miscellaneous operations
503. Hire of freight cars—Credit balance
504. Rent from locomotives
505. Rent from passenger-train cars
506. Rent from floating equipment
507. Rent from work equipment
508. Joint facility rent income
509. Income from lease of road
510. Miscellaneous rent income
511. Miscellaneous nonoperating physical property
512. Separately operated properties—Profit
513. Dividend income
514. Income from funded securities
515. Income from unfunded securities and accounts
516. Income from sinking and other reserve funds
517. Release of premiums on funded debt
518. Contributions from other companies
519. Miscellaneous income

II. DEBITS:

531. Railway operating expenses
532. Railway tax accruals
533. Uncollectible railway revenues
534. Expenses of miscellaneous operations
535. Taxes on miscellaneous operating property
536. Hire of freight cars—Debit balance
537. Rent for locomotives
538. Rent for passenger-train cars
539. Rent for floating equipment
540. Rent for work equipment

541. Joint facility rents
542. Rent for leased roads
543. Miscellaneous rents
544. Miscellaneous tax accruals
545. Separately operated properties—Loss
546. Interest on funded debt
547. Interest on unfunded debt
548. Amortization of discount on funded debt
549. Maintenance of investment organization
550. Income transferred to other companies
551. Miscellaneous income charges
552. Income applied to sinking and other reserve funds
553. Dividend appropriations of income
554. Income appropriated for investment in physical property
555. Stock discount extinguished through income
556. Miscellaneous appropriations of income

Primary Profit and Loss Accounts

The Interstate Commerce Commission defines profit and loss accounts as a group thus: "Profit and loss accounts are those designed to show the changes in the corporate surplus or deficit during each fiscal period, as affected by the operations and business transactions during that period, by any disposition of net profits made solely at the option of the accounting company, by accounting adjustments of matters not properly attributable to the period, or by miscellaneous gains or losses not provided for elsewhere; and to show also the unappropriated surplus of the carrier at the date of the balance sheet."

I. Credits:

601. Credit balance (at beginning of fiscal period)
602. Credit balance transferred from income
603. Profit on road and equipment sold
604. Delayed income credits
605. Unrefundable overcharges
606. Donations
607. Miscellaneous credits

II. Debits:

611. Debit balance (at beginning of fiscal period)
612. Debit balance transferred from income
613. Surplus applied to sinking and other reserve funds
614. Dividend appropriations of surplus
615. Surplus appropriated for investment in physical property
616. Stock discount extinguished through surplus
617. Debit discount extinguished through surplus
618. Miscellaneous appropriations of surplus
619. Loss on retired road and equipment
620. Delayed income debits
621. Miscellaneous debits

SAFEGUARDS IN BOOKKEEPING AND SUBDIVISIONS OF ACCOUNTS.—Considerations of economy and simplicity give way to the needs of control when the latter is paramount. The practicable problem which the financial administrator so often has to decide for himself is typified by the question: To what extent does it pay to incur the expense of refinements and proofs of accuracy in bookkeeping for the sake of possible savings to be gained thereby? Under the headings immediately following an attempt is

made to outline the principles that will assist the financial manager in answering that question.

Control of Cash and Securities.—No individual in the employ of another, or in the relation of agent or trustee for another, should wish to assume responsibility for the faithful handling of cash or securities without welcoming the **independent verification of his records** by another person. No employer or principal should fail to arrange for a systematic checking of the records of any employee or agent who in the course of his duties has to handle cash and securities. It is for the mutual protection of both parties that this principle should be observed and it implies no attitude of distrust of one toward the other. It is in the observance of this principle that routines of work in large offices are so arranged that no one person has the sole and exclusive duty of handling cash or negotiable instruments of value unchecked by some other individual or department. This principle of organization is to be applied even at the cost of inconvenience or additional expense. **Methods of counter-check** have been devised that accomplish essential proofs of fidelity without entailing inordinate expense.

Stores Control.—Shall **continuous records** be kept of materials in and out of stockrooms? Shall those records, if kept, be for quantities only or for values as well as quantities? Continuous records of stocks of materials are costly to maintain, and to be accurate they must be constantly checked. For that reason the questions just raised are all the more significant. The following principles may be helpful as marking out with some definiteness the degree of control which can be prudently had over stocks of materials:

1. If a stock of goods is not large and the proprietor can personally have oversight of it, there is no need of any records of the items of materials except such data as will enable him to place reorders intelligently in replenishing his stock.

2. If the managers cannot have personal oversight of the stock, but can arrange for physical control of the goods, they may be able to dispense with all records save the very simplest. An example: mass production of a single product by mechanical processes which automatically regulate the consumption of materials.

3. If, in the nature of the materials and because of the size of the organization, the management can neither have personal oversight of stocks nor arrange for physical control fully insuring against misappropriations, then there is need of records. How detailed these records shall have to be is a further question that is answered in (4) to (7) following. Quantity and value both must be considered.

4. The need of control does not always necessitate the keeping of records of the individual items in the inventory. **Stocks in retail chain stores,** for example, are controlled by a scheme of accounting which checks the correctness of the cash sales reported for a period by physical inventories taken at intervals and valued at retail prices. No inventory record is kept with each separate commodity; the clerical expense of such a record would be prohibitive. Yet through the medium of totals for all commodities an effective control is had over the fidelity of each store manager.

5. In some industries records of receipts and issues of each article may have a double purpose, one contributing to essential production records, the other to financial control of the monetary investment. An example is furnished by factories and textile mills that make a great variety of finished products from parts or yarns, considerable quantities of which are carried in stock. Because of wide variations in cost of the components, each receipt and issue has to be

separately priced as a means of obtaining the total amount of inventory in dollars. The expense of this work is compensated for by the dovetailing of the accounting and production records, which makes one structure serve two purposes.

6. The valuation of receipts and issues may be dispensed with in certain industries where the investment in inventory can be calculated easily at the end of the month or period. Industries of the type cited in (2) above may have inventories which can be readily enough valued from the state of the manufacturing process at a given date. The principle of technique applicable here is that if an inventory can more easily and at less clerical expense be valued from inspection at the close of every month, then so far as ascertaining the investment in inventory is concerned the keeping of records in dollars for receipts and issues is unnecessary.

7. When the amount of investment in inventories is large and the amount in dollars cannot be arrived at by physical appraisal, except at inordinate cost and delay, then accounts must be kept to show the changes from month to month in the monetary investment in stocks on hand. The expense of keeping such accounts is large but not disproportionate to the value of control which is thereby secured.

Subdivision of Expenses.—Control of expenses must be applied at the point where responsibility for origination of expense centers. Therefore, the principle of classification of expenses should be to group them according to the individuals in the organization who are to be held accountable for the amount of expense incurred. This principle is in harmony with the classification of expenses in the budget. What is most to be sought for is a **direct relationship between the departments of organization and the classification of the expense accounts.** What has just been said pertains to the **primary accounts.** These may be subdivided, first, according to sub-units of the organization and second, according to the nature of the expense. These subdivisions can be had by the simplest clerical process so that the cost of obtaining the details is low. As long as expenses of subdivisions are called for in executive reports, it is undoubtedly a saving in the end to have them recorded in subsidiary accounting records.

Apportionment of expenses should not be confused with subdivision of expenses. Apportionment should not be carried too far in the general ledger. As a general principle it may be said that the apportionment of expenses from one account to others in the general ledger should be limited to items like clearing, apportionment and equalization which have been described above. It is preferable, as a general rule, to let the original expense accounts remain free of apportionment entries and to credit the amounts of apportionment to special accounts. This method facilitates the preparation of statements from the ledger on the basis of classifications either before or after apportionment, and the mathematics of the apportionment are just as precise.

Cost Data.—Costs of units of product are most serviceable when they can be made use of in **predetermining** when the present scale of selling prices will no longer yield a fair margin of profit. In some degree cost data may be used in the setting of selling prices. That, however, is not so fruitful a service of cost data as that of **regulating the margin of profit** in selling prices set by the general market. Details of cost may profitably be compiled as long as they disclose to the management information which helps it to regulate favorably the margin of gross profit.

Fixed Property Ledger.—A card or loose-leaf ledger recording location, cost, depreciation and other data relative to separate units or classes of land, buildings, equipment and machinery usually repays the expense of maintaining it. A corporation with a large investment in fixed property scattered over a wide territory cannot safely leave to physical inspection alone the requisite control of that investment. Renovations, sales of obsolescent machines and devices, and identification and disposal of surplus equipment can often be advantageously brought about with the aid of property records, and may be overlooked or too long deferred without such records.

BOOKS OF ACCOUNT AS EVIDENCE.—The possible introduction of books of account as evidence **in courts of law** should not be disregarded by the financial manager. Courts are usually unwilling to admit books of account in evidence where better proof might be adduced, for the reason that their admission without careful scrutiny would make it possible for parties to manufacture favorable evidence. If the books are to be admitted they must be books of **original entry,** i.e., they must contain the original or first **permanent** record of the transaction. The ledger, posted from a journal, is not ordinarily admissible. The entries must have been made in the ordinary course of business and at or reasonably near the time of the transactions to which they relate. Entries **must be authenticated** by the person who made them or by some one who can state, under oath, that they are correct. Ordinarily books of account are evidence only of transactions between the parties to the litigation; they cannot be used to prove collateral matters. For instance, books of a partnership are not evidence that a party was a member of the partnership. A witness who made the entries in the books of account may refresh his memory by referring to them. Where the party offers books of account in evidence he renders admissible the unfavorable entries as well as the favorable entries. Because of the evidential value of books of account every entry written in them should be so clear and explicit that there can be no doubt, even years after the transaction, as to its meaning. Entries in the books should be supported by such explanations and references therein as will make plain beyond any possible question what the transaction was that the entry purports to record.

Audits

The purpose of this section is to present to financial executives the salient features of internal and external audits and to furnish a brief description of the procedure ordinarily followed by auditors in making audits.

PURPOSES OF AUDITS.—The **chief purposes** of audits are:

1. To ascertain the actual financial condition and earnings of concerns for:
   (a) The proprietors (individual proprietor, partners or stockholders).
   (b) The executives (managers, officers, or directors).
   (c) Bankers and investors who are considering the purchase of securities.
   (d) Bankers who are considering the discounting or purchasing of promissory notes.
2. To detect fraud or errors.

In addition there is the **moral effect** of an audit, tending to keep the work of the office staff sharply up to date.

INTERNAL AUDITS.—Internal audits are those made by the concern's own salaried auditor. The scope of such audits is generally limited to the **verification**

of the statements prepared by the accountant or bookkeeper of the concern and to the determination that transactions have been correctly recorded by other employes. The staff auditor is also expected to be on the lookout for irregularities and to make suggestions for the prevention of losses.

Internal Auditor's Position in the Organization.—Generally, the internal auditor reports to the treasurer or comptroller. In quite a few instances, however, he is independent of these officers and is responsible only to the head of the concern or someone having authority superior to that of the comptroller or treasurer.

Duties of the Internal Auditor.—The duty of an internal auditor is to make certain that the cash, merchandise and other commodities are handled and recorded in such a manner as to minimize loss or confusion of effort. He should determine that all other transactions are properly recorded and, finally, should verify the statements prepared by the concern's accountant or bookkeeper.

INTERNAL AND EXTERNAL AUDITORS.—The distinction between staff and professional auditors is that the external or professional auditor has, through his contact with diversified industries and institutions, assimilated a fund of knowledge which he is able to draw upon and apply advantageously to each new case on which he is engaged. Ordinarily the internal auditor is limited in experience to the procedure followed by the particular industry in which he is employed. Secondly, the professional auditor, being responsible to external authority is in a position to take a **more impartial view** of conditions than is the staff auditor whose policies may be dictated by his superior officer in the company.

EXTERNAL AUDITS.—The work of the external auditor varies according to the type of audit or examination which is being made. Audits are usually classified as follows:

Cash Audits	Detailed Audits
Continuous Audits	Investigations
Balance Sheet Audits	

Cash Audits.—Cash audits consist of a **verification of the cash transactions** during a given period and of **cash balances** at the close of the period. This type of audit is not entirely satisfactory inasmuch as an audit should cover a verification of all kinds of transactions, not only cash items. For instance, the cash audit would limit the examination to the verification of the payment and its propriety without permitting the auditor to ascertain the final disposition of an asset which might have been acquired through the payment. In a cash audit the auditor merely ascertains that certain funds have been deposited in bank, whereas the more important duty is to disclose items which are not accounted for. The latter condition is accomplished only through a complete audit.

Continuous Audits.—The term "continuous audit" applies to examinations made at intervals with a view to covering a full period by a **series of examinations.** The **advantages** of such audits are that they avoid congestion at the end of the period and errors of principle, clerical errors and fraud are detected at the earliest possible date and corrected before much damage is done.

Balance Sheet Audits.—Balance sheet audits consist of a verification of assets and liabilities and such an examination of income accounts as may be necessary to enable the auditor to certify that the income has been properly stated. As in the case of the cash audit, there are limitations to balance sheet audits, inasmuch as a detailed check of all transactions during the year is not made,

it being sufficient in such audits to certify that as of a certain date the assets then on hand and the liabilities set forth are correctly stated.

Detailed Audits.—Detailed audits include the verification of the assets and liabilities and all or a large part of the transactions of the period under review. In concerns having no satisfactory internal check, the detailed audit is the only kind of an audit through which a complete verification of the income and expenditures for a given period may be made. The **chief distinction between balance sheet and detailed audits** is that in balance sheet audits the work of verification centers at a specified date, whereas in detailed audits the transactions during a fiscal period and their effect must be verified. While the verification consists largely of review and tests, nevertheless the tests must be broad as well as representative, and must cover the entire period under review.

Investigations.—Investigations are examinations made for special purposes. An investigation may cover the verification of all the assets and liabilities and even all the transactions in a period, or it may be confined to a verification of a part of these items, depending on the purpose for which it is made. Some investigations undertaken by the professional auditor may involve intensive examinations of all or certain parts of the records or transactions.

Among the **more important purposes** for which investigations are made are the following:

1. To prepare financial statements for credit purposes or for the sale of securities.
2. To prepare statements for the purchase or sale of a business.
3. To prepare statements for reorganizations, receiverships, arbitrations, etc.
4. To prepare statements to be used in settling matters in dispute, fire losses, claims against bonding companies, claims on contracts, etc.
5. To prepare statements to be filed with governmental or other bodies, such as tax returns.
6. To investigate certain conditions existing and to make suggestions to increase profits, decrease losses or to prevent waste.
7. To investigate the operations of public utilities, governmental departments or special associations for the public.
8. To prepare reports with respect to alleged fraudulent transactions, or for parties in litigation or disputes, such as the determination of the profits derived from the manufacture of patented articles, etc.

QUALIFICATIONS OF THE AUDITOR.—The auditor should have a thorough knowledge of the science of accounts. He should, in addition, have a working knowledge of such kindred subjects as economics, engineering, finance and law, and should keep constantly in touch with current business conditions. He should be possessed of constructive as well as analytical ability. His broad experience should furnish the background for the exercise of good judgment. He should be sufficiently versed in the use of the English language to express his thoughts and findings clearly and in a manner that will be readily understood by the readers of his reports.

NATURE OF AUDITOR'S DUTIES.—The range of duties of an auditor is broad. The particular points which may be covered by his work are governed largely by the purpose for which an audit or examination is made. He should ordinarily make such an examination as to satisfy himself that the **assets** have been **correctly valued** and that the **liabilities,** both actual and contingent, have been **fully stated.** He should also satisfy himself that the revenue has been neither under nor overstated, and that all expenses applicable to the

period, but no more, have been included in the income statement. In the course of his examination he should keep on the alert to discover any irregularities which may exist and to note any weaknesses the elimination of which would tend to increase the profits or prevent waste or loss. Finally, he should, as a result of his work, be able to prepare financial statements in such form as to preclude any likelihood of their being misinterpreted.

BEGINNING OF AN AUDIT.—At the beginning of the audit or, at least, during the first few days, the auditor endeavors to obtain an idea as to the type of report which would make the proper appeal and the data which should be included in, or excluded from his report. Before commencing the detail of the audit, he endeavors to obtain as much information as possible relative to the organization. Also, he endeavors to familiarize himself with the **system of internal check** existing in the accounting procedure of the concern. An internal check consists in the accounting records, methods, and details generally of an establishment being so laid out that no part of the account or procedure is under the absolute and independent control of any one person; that, on the contrary, the work of one employee is complementary to that of another; and that a continuous audit is made of the details of the business. The professional auditor should, furthermore, make it a point to become acquainted with current business conditions affecting the industry under examination.

STATEMENTS TO BE PREPARED FOR THE AUDITOR.—It will be to the advantage of the financial executive if he will arrange in advance for his employes to prepare certain statements, schedules, etc., for the use of the professional auditor. If such data is submitted to the auditor it will expedite the work and reduce the cost of the audit and permit the auditor to spend time on more important work. The following list comprises some of the schedules, etc., which may be prepared to good advantage by the clients' employes:

List of bank balances (if there are many bank accounts).
List of cash funds.
List of cash items in transit.
List of notes receivable on hand (where not too numerous).
List of notes receivable out of office.
List of notes receivable discounted.
List of investments, including mortgages receivable.
List of special deposits made.
List of employees' accounts receivable (where not too numerous).
List of additions to plant during the period (if the items are very numerous, then a list of all items over a certain amount).
Statements of additions to and deductions from depreciation reserves during the period.
Schedules of prepaid insurance, interest, taxes, and other prepaid expenses.
Schedules of deferred charges such as bond discount, organization expenses, etc.
List of notes payable.
List of mortgages payable.
Schedule of accrued interest, taxes, wages, or other accruals.
List of special deposits held.
Schedule of purchase commitments.
Schedule of sales contracts.
Schedule of insurance carried.

Not all these statements will be found necessary in any one audit and the items in each statement for one audit will not be numerous. Many of these statements may be simply copies of parts of certain records which can be prepared by typists with little assistance from the bookkeeper.

Balance Sheet

That the financial executive may be acquainted with the purposes of the work done by the auditor, some of the results which may be obtained in the **verification of the assets and liabilities** are mentioned in the following paragraphs:

VERIFICATION OF ASSETS.—

Cash on Hand.—The examination of the cash funds may reveal the fact that the amount which should be on hand is not intact and that there is a shortage for a substantial amount. It may be found that the fund is represented in part by **memoranda, due bills, etc.,** which are not authorized and which may not have full value. Fairly large amounts carried as cash may represent **prepaid or deferred expenses** which had not been recorded.

Bank Balances.—The examination of the bank balances is made primarily to verify the existence of the cash reported as being in bank and that such funds are **free from liens.** There is a possibility that the persons handling the bank balances may manipulate the deposits or the checks drawn to cover defalcations. The auditor must, therefore, have in mind in his verification the methods through which shortages have occurred. The auditor is also interested in ascertaining whether the balances carried are excessive, in which case a recommendation should be made for the **investment of surplus funds.** If **interest** is allowed **on the bank balances,** it should be ascertained whether the highest possible rate is received. The examination of the bank accounts should bring to light any weaknesses in the methods of drawing, signing or cashing checks, and in the recording of these transactions.

Notes Receivable.—The auditor is primarily interested in determining that this balance represents notes **received through current transactions,** which are not overdue and which will in all likelihood be collected at maturity. The notes of officers and employees and other personal notes which were not received as part of the current operations should receive special consideration, so that they may be stated separately on the balance sheet. Notes which have been discounted may develop into real liabilities if they are not paid by their makers at maturity and the **contingent liability** arising in this connection should be stated clearly on the balance sheet.

Accounts Receivable.—The auditor should assist the bookkeeper and the credit man in keeping the customers' ledgers clean by the **elimination of unadjusted balances of long standing and accounts which are uncollectible.** As a minor duty he should call attention to errors in the accounts and to the ledgers which may not be in balance. He should determine whether all the balances represent customers' accounts which appear to be collectible. The balances due from officers, employees, affiliated companies and other accounts, which do not represent regular transactions, should be stated separately. The examination of the ledger accounts should furnish the auditor with data to determine whether the **reserve for doubtful accounts** is sufficient. From this examination the auditor should be in a position to state whether **credit** is being **extended too liberally** or whether **too severe restrictions** on the extension of credit are

having an unfavorable effect on the earnings. Many concerns pledge their accounts receivable as collateral for loans. When this condition exists, the **extent of the lien** should be clearly stated.

Investments.—In addition to the verification of the existence of documents indicating that the investments are held **free from liens** and to the verification of the income therefrom, the examination of investments includes the determination of the **necessity for the investment** and the ascertainment of the **possibility of increasing the return** on the amount invested.

Inventories.—The examination of the inventories is made primarily to determine that the **valuation** is conservative. The auditor must ascertain that the articles listed are the property of the concern under audit, that the quantities are not excessive, that the merchandise is neither obsolete nor damaged and that the inventory is **priced at cost or market whichever is lower.** The auditor should whenever possible inspect the merchandise and make tests of the accuracy of the quantities. The **condition of the merchandise** should be noted as well as the methods of securing, storing and delivering the merchandise. An examination of the inventory includes a study of the **purchase and the sales contracts,** with special reference to possible losses due to excessive commitments in a falling market, or in a rising market where sales orders have been booked without purchase commitments for corresponding quantities.

Prepaid Expenses.—Overstatements of the assets have frequently occurred through errors of substantial amounts in computing the asset value of prepaid taxes, interest, rent, insurance and other expenses. The auditor should therefore ascertain that such amounts are approximately correct.

Deferred Charges.—There is a tendency in some quarters to defer the charge to operations for experimental and other special expenses to such an extent that both the net income and the assets are unduly overstated. For instance, some concerns defer fairly large amounts representing advertising or selling expenses without justification. The auditor should satisfy himself that there is a reason for each deferred charge and that such amounts are conservatively stated.

Plant.—The examination of plant accounts consists of a complete investigation of the entries in these accounts to determine that only plant items in current use have been included. Buildings, machinery and equipment not in current use should be segregated and stated separately. After the examination of the plant accounts the auditor should be in a position to determine the policy of the concern relative to the **capitalization of minor additions and the making of repairs, renewals, etc.** The auditor must determine whether the **provision for depreciation** of buildings, machinery, equipment, etc., is adequate. His decision will be based to a certain extent on the policies of the concern as to repairs, renewals and the capitalization of minor additions. The balances of some plant accounts may have been increased to take advantage of **appreciation arising from appraisals.** The auditor must satisfy himself in such cases of the reliability of the appraisers and ascertain the basis on which the appraisal was made and the reasons for giving effect to the appreciation in the records.

It may be found that an entry in the plant account represents the first installment paid on the purchase of machinery on a deferred payment plan, the vendor retaining a lien on the machinery until final payment is made. The auditor will insist in such cases that the full contract price be entered in the plant account and the unpaid installments be included among the liabilities and that a notation be made of the lien held by the vendor. When the plant or any portion of it is constructed by the concern itself the auditor has a special

duty to ascertain that the cost of such items does not include a profit to the concern under audit.

Patents, Copyrights, etc.—It should be ascertained that these assets are carried **at cost** unless the cost exceeds their value to the concern. It must also be ascertained that such assets are being amortized over the life of the right. If the value will not carry for such a period, the asset should be written off over a shorter period.

Good Will.—In the case of a going concern, the auditor's only duty is to ascertain that good will is not carried at an amount exceeding cost. Sometimes the auditor is requested to determine the value of **good will in connection with the prospective purchase of a business.** Under these circumstances, he studies the results of the past with the idea of eliminating all elements therein which will have no effect on the future operations. Changes which may be inaugurated by the prospective purchaser are also given consideration. There are many formulas used in calculating good will. It is not possible to enumerate all of them here. A favorite method, however, is to compute the good will by capitalizing on the basis of from 3 to 7 years, the excess value of earnings after allowing adequate salaries for the executives and a return on the investment at, say, from 6 to 10%.

Contingent Assets.—The very nature of these items, which may shortly be converted into real values, makes it important that the auditor give them careful attention so that probable assets of substantial amounts may not be omitted from the balance sheet.

VERIFICATION OF LIABILITIES.—

Notes Payable.—The ascertainment of the full liability for notes payable is in some cases a difficult task. However, if the records are complete, unless there is a deliberate concealment of the proceeds of the notes discounted, the auditor should have no difficulty in ascertaining the total of the notes outstanding. The notes should be classified as to those payable within one year and those payable subsequent thereto. They should also be classified as to those due to—

Banks or bankers	Officers, employees, etc.
Trade creditors	Notes secured by collateral
Affiliated companies	

The auditor should consider whether the amount of the loans or the rate of interest is excessive. He should also consider whether there is a tendency to borrow excessive amounts.

Accounts Payable.—An important duty of the auditor is to ascertain that all liabilities for accounts payable have been included in the balance sheet. The omission of such accounts will not only understate the liabilities but will also understate either the assets, or the costs, if a merchandise invoice is omitted, or overstate the income if an expense invoice is involved. It may be true that very few balance sheets contain a correct statement of the unpaid accounts; however, the accounts omitted are generally very small in amount and as a rule are more than offset by conservative valuations of assets and liberal provisions for reserves. The auditor is specially interested in ascertaining whether there are fairly large amounts of **overdue accounts,** as this may mean that the concern may be called upon to disburse substantial amounts in the near future. If such a condition exists, it is his duty to state the facts so that persons who are extending credit to the concern may not be misled. The accounts payable may be classified as follows:

Trade creditors
Officers and employees
Affiliated companies
Deposits
Credit balances of accounts receivable

Accrued Liabilities.—The auditor should examine the minutes, leases, contracts and other ocuments to make certain that all interests, rents, wages, commissions and other accrued liabilities have been recorded.

Bonds and Mortgages Payable.—The examination of the liabilities for bonds and mortgages includes not only the verification of the amounts and the due dates but also the ascertainment that all the **conditions in the bond or mortgage indenture** are being carried out. The stipulations in the bond indenture may provide for the maintenance of a certain ratio of current assets to current liabilities. There may be a provision that dividends shall not be declared if their payment will reduce the surplus below a certain amount. It is the auditor's duty to see that the stipulations in the indenture are carried out. The liability for bonds or mortgages outstanding should be stated in such a manner that it may be ascertained without difficulty when the payments are to be made.

Reserves.—In addition to the reserves for valuation of assets, such as accounts receivable and plant, there are **reserves for estimated liabilities** where the actual amount of the liability is not known, and **reserves for special purposes** from net income or from surplus. If these provisions are either excessive or inadequate, the financial position of the company may be misinterpreted by persons reading the balance sheet. The auditor must, therefore, make a careful study of these provisions to satisfy himself that there is a need for the reserve, and that the amount provided meets the need.

Contingent Liabilities.—While these liabilities are not definite or actual at the time they are stated, a change in their status to real liabilities may have a serious bearing on the condition of the company. It is, therefore, important that the auditor acquaint himself with all the facts relative to the contingent liabilities so that he may make a fairly definite statement thereof on the balance sheet.

CAPITAL STOCK.—There are many special points which require the attention of the auditor in the verification of the outstanding capital stock. He should ascertain the amount of **accumulated dividends on preferred stock** and set forth this data on the balance sheet. He must acquaint himself with the **rights of each issue of stock** and also the **stipulations** made when the stock was issued. Specific notations must be made on the balance sheet as to those rights or stipulations which have a bearing on the creditors or the equity of different classes of the stockholders. The auditor must call attention to violations, if any, of the agreements made when the stock was issued.

SURPLUS.—The auditor has a special duty to examine closely the entries in the surplus account and to state clearly all items of substantial amount. He must also make certain that there has been no confusion between **earned surplus** which should be available for dividends and **capital surplus** arising from appreciation of assets, gifts, premiums on capital stock, etc.

Income Statement

INTERNAL AND EXTERNAL AUDITS.—The work done in the verification of the balance sheet items for internal audits does not differ materially from that done for the external audit. This is not true, however, of the examination

of the accounts in the income statement. If the **staff auditor** of a small or medium-sized concern is making an examination, he should verify the revenue and expense accounts in detail, while the staff auditor of a large concern should make rather exhaustive tests of these accounts. The **professional auditor,** unless it is otherwise agreed, would make exhaustive tests of the revenue and expense accounts of the small or medium-sized concern, and limited tests when the accounts of large concerns are under audit. In either case, the extent of the verifications made would depend on the condition of the records and the capabilities of the accounting staff.

REVENUE.—The auditor's duty is to ascertain that all revenue earned has been properly recorded. He should also ascertain whether all the revenue which might have been earned under the conditions existing has been received.

Sales.—The auditor should verify the fact that **full value** has been received for the merchandise sold. Illustrations of errors which may be discovered by the auditor include failure to bill merchandise sold, errors in pricing sales, errors in discounts allowed, errors in the calculation of sales invoices, errors in summarizing sales figures, errors in credits made for returns or allowances. The sale transactions should be followed through by ascertaining that cash has been received for all cash sales, that customers have been billed and charged, and that the amounts charged have been collected.

Income from Investments.—Such examination should be made as may be necessary to determine whether **interest and dividends** have been **collected** on investments held by the client and are stated properly in the income statement.

Miscellaneous Revenue.—The examination of the assets and liabilities and the expenditures will reveal transactions which indicate that rents, refunds, special allowances, proceeds of the sales of scrap, etc., should be received. Such leads should be followed to determine whether all the income which should accrue to the concern from these sources has been received.

EXPENSES.—The auditor should see to it that all expenses are properly recorded.

Purchases.—The verification of purchase invoices covering not only purchases of materials and merchandise but expense supplies is an important part of each audit. The examination of these invoices may bring to light errors of judgment as to the quantities purchased or the prices paid, errors in the deductions of discounts or the failure to take advantage of deductions for freight, refunds or other allowances, as well as errors in computation, and in some cases, duplicate payments.

Pay Rolls.—The authorization for the payment in this case originates within the organization, and all steps including the disbursing of the cash are entrusted to members of the organization. The auditor, therefore, has a special duty to study the system in use and to satisfy himself that there are neither irregularities nor negligence in this department.

Other Sources.—There are many disbursements for services other than those included on the pay roll; for instance, rents, royalties, commissions, traveling expenses, etc. The **original papers** for these expenses are, in many cases, prepared by the employees of the concern. These records should, therefore, receive the special attention of the auditor.

Interest Paid.—The interest payments should be examined to determine the propriety of the payment, the accuracy of the computations, and whether

h. rate charged was reasonable. The auditor should satisfy himself that there vas a real need for the amount borrowed.

Office Methods and Miscellaneous

AUDITOR'S COMMENTS.—Whether the audit is an internal or an external ne, the auditor should be in a position when his work is completed to comment n the **adequacy of the records** and the **efficacy of the system of accounts.** He should also be prepared to state that the procedure followed by the receiving nd the shipping departments fully protects the client's interests. The method f handling the **cash receipts and disbursements** and the recording of the cash ransactions should also receive attention. There are in every office many ecords which, while they are not a part of the books of accounts, contain data which the auditor should examine. The adequacy of these records, or the ecessity for their continuance, should be considered. Any lack of co-operation mong the employees which may result in errors or losses, any neglect of indi-idual duties, and any other conditions noted which affect the client's interests dversely, are matters upon which the auditor should comment.

MINUTE BOOK.—Among the subsidiary books which the auditor must xamine is the minute book as it contains data relative to special contracts, lividends, officers' salaries, and decisions of the directors on other matters which should be traced to the books of account.

INSURANCE.—It is a part of the auditor's duty to ascertain that the amount f insurance carried is neither excessive nor insufficient. He must also ascertain whether the client's interests are fully protected through fidelity bonds, con-racts for casualty insurance, use and occupancy insurance, and any other orm of indemnity which may be of assistance in spreading large losses over a eriod of years.

AUDITORS' REPORTS.—Through these statements the auditor tells the **tory of the financial position and the results of operations** of the concern which as been examined. If his story is not well written and cannot be readily nterpreted, the good work which he has done during the audit may be largely ffset by the adverse impression which the client will gather from the report. There should be no standard form of audit report or statements. Many actors militate against such standardization, among which may be mentioned he following:

1. Each business examined has its peculiarities.
2. The capabilities and the views of the individual to whom the report is addressed must be considered.
3. Conditions in the same business vary from year to year.
4. The examination may be made and the report rendered, with some special purpose in mind.

Statements should be limited to the essentials. In many instances a balance heet and an income statement will suffice. It is found advisable in certain ases to supplement these statements with a surplus account, lists of securities wned, lists of special asset or liability items, special cost statements, or other data supporting items in the income statement. These statements should be urnished as a rule only when such data is not otherwise available to the person ddressed, and when it will be of interest to him, or if the adjustments made o the statements prepared by the employees make it advisable to prepare new tatements.

SECTION 26

COST DETERMINATION

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SECTION 26

COST DETERMINATION

COST ACCOUNTS NEEDED FOR MANAGERIAL CONTROL.—The establishment of a suitable cost accounting system is an essential duty of the financial manager. Modern business executives want to know their costs. Manufacturers cannot afford to be without reliable knowledge of the costs of their productive operations and the cost of their finished products, and merchants must know the cost of maintaining their various departments or stores in order to set selling prices intelligently. A **suitable cost system** is one that supplies promptly and with reasonable accuracy the data needed by the management for the regulation of product, the control of operations, and fixing of prices.

The cost system must be shaped to the needs of each business and with full regard for the factors therein which make for success. It should be designed by one who has a knowledge of the operating methods and processes and a keen perception of the points where greatest care must be exercised to avoid losses and where greatest opportunities for economies are offered. The general principles of cost finding are applicable to most businesses, but the methods best for each business differ widely. Almost every industry requires a distinctive system and companies in the same industry use different methods. No one system can be used blindly. In fact, the most practical and effective results are often obtained from a combination of several of the prevailing general types of cost determinations. The primary consideration should be to have a system so fitted to the business that it will **develop information accurately** and in a form to be readily usable by the management. It is the use of costs rather than the system that really counts.

COST ACCOUNTING DEFINED.—Cost accounting may be defined as a procedure for determining the actual costs of the articles produced or services rendered. Costs may be classified as manufacturing, selling and administration. The **manufacturing cost** of an article is made up of the actual cost of all materials directly used in its manufacture, the actual cost of the labor applied in productive operations and a proper proportion of the indirect material, labor and general overhead expenditures. The **selling and administration costs** should be kept separately, because usually the direct control and responsibility for such costs are placed upon different executives. Selling and administration expenses should not be included in costs which are used for inventory valuations, but a proper share of such expenses should be added to manufacturing cost to obtain the total cost required for selling prices.

Cost Systems

SELECTION OF PROPER TYPE OF COST SYSTEM.—The selection of the proper basis for costing is most important. The ascertainment of the

ost of each unit of production should not be considered the sole aim of cost ccounting. The system should be developed to furnish also data which ill be used for factory control and to assist in the selection and arrangement f machinery and plant facilities. The cost accounts should be designed so hat they will provide a check upon the expected results of the sales and pro- uction policies, and, in general, further the development of a sound business olicy. In reaching a decision as to the cost basis, careful study should be iven to the operating conditions and to the proposed utilization of the cost gures.

Cost figures are of little value unless used for constructive purposes; there- ore, the figures must be compiled and presented in such form as to be intelli- ible to the operating organization. **Unit costs** in themselves mean little, but onstructive analyses of such figures often point to production losses which ay be stopped, and at times induce the introduction of improved machinery r better factory organization and layout. The intensive development of pecial machine tools and the inauguration of mass production methods during he last few years evidence the pronounced influence of cost determinations nd studies upon the actions of far-sighted manufacturers.

Even in **highly competitive industries,** where sales prices seem to have but ttle relation to costs, the factory cost of the product must be known. In such nes earnings are dependent largely upon cost reductions and economical manu- acturing. The possibilities of reductions of expenditures are often disclosed n a detailed examination of the items entering into cost by one who has a nowledge of factory conditions. The effect upon unit costs of **increased sales olume,** secured as the result of decreased selling prices, may also be computed. he inter-relation between costs, production volume and sales prices is the asis of the quantity production business policy. The cost accounts are relied pon to indicate the volume needed at the assumed attractive sales prices to over costs and yield a fair return upon investment.

TYPES OF COST SYSTEMS.—The principal prevailing procedures for ompiling costs are the special or production order, the class, the process, the peration, and the product methods. Under the **production order method** a anufacturing order is issued for the production of definite units of standard r special articles and the costs of all material and labor applied to the order re charged thereto. Upon completion of the article, a portion of the indirect actory expenses are added to the total of the direct material and direct labor osts to obtain the total production costs of the finished units covered by the rder.

The class cost method is really a condensed form of the production cost ethod. Its use is extending rapidly, and it is supplanting the special order ethod in many plants because it furnishes essential cost data more quickly nd without confusing details. It is particularly suited to businesses in which he cost of an individual order is relatively unimportant as compared with the ost of all orders for similar classes of goods. The class cost method provides r the ascertainment of a production order cost for any particular order desired. he operation of the class cost method involves a **grouping of orders for like roducts** into classes, after which costs are obtained for classes of production much the same way as under the production order method. When orders re small and numerous, class costs are much more useful than production rder costs because they reflect a composite and average operating cost. Pro- uction order costs for small quantity usually show wide variations due to erical errors or inaccuracies in the materials and labor reports. The mass of

detail work incident to production order costs is a fruitful ground for errors, and much of this is avoided in the class cost method.

In certain types of manufacturing **the process method** is used because it is impossible to segregate or identify definite units of production as they pass through the manufacturing processes. Under this method the actual costs of the materials and labor going into each process are **charged to the process or operation,** as are also the proportions of overhead applicable to the process. The cost of each process is found by dividing the total of the material, labor and overhead costs by the quantities produced. The cost of the finished product is the sum of the costs of each process through which the product passes. The **machine cost method** is a modification of the process type, and the **operation method** is similar, except that usually it ignores the material costs.

IMPORTANT CONSIDERATION IN CHOICE OF TYPE.—The distinction between one type of cost system and another may be very slight. The names for the various types indicate only those features which are emphasized in that particular method. The modifications of each type are many, and they so overlap one another that they are sometimes difficult to classify. The general types should be adjusted to meet local conditions and combined when conditions require a combination type. The type of system should be selected with due regard for the nature of the industry; the nature, volume, and variety of the product; the method of processing the product; and the departmentalization or production centers of the factory in which the goods are produced.

SPECIAL OR PRODUCTION ORDER TYPE OF COST SYSTEM.—The special order type of cost system is generally applicable in jobbing and specialty shops, construction work, repair shops, metal-working, medium and heavy machine tool plants, and factories making a variety of costly units. It is, however, the **most expensive to operate** and it should be used only when the results obtained from the cost figures justify the expense. The **principal determining factors** for the use of this method are the average value and the number of orders handled. If there are a small number of orders for large aggregate values it would be the best system to use, but if there are a large number of orders of relatively small average value, some other type may be preferable.

In the special order costing plan the production orders and the cost orders are the same. The **cost order** is usually a duplicate of the **production order,** and all cost work is closely related to the production work. This is the only system that provides such a direct relation between the production order and costs. Among the **disadvantages** of the special order method of costs are:

1. Errors arising from the large volume of detail work.
2. Length of time required to complete costs on finished orders.
3. Difficulty in handling costs of partial shipments.
4. Lack of analytical data for cost control purposes.

The enormous amount of detail work incident to the special order type of cost system in a factory of average size makes it very difficult to avoid errors and omissions. Unfortunately most of these errors result in understating costs, and unless the accounting supervision is unusually well done, the physical inventory or work in process usually shows that the book inventories are overstated.

The length of time to complete special order costs very often makes them too late to be of any real help in reducing costs. In some cases the cost figures are obtained even too late to be of use in connection with the setting of selling prices, and consequently they are used only for comparisons with the costs

of similar goods produced recurrently. Such limited use seldom justifies the expense of obtaining costs.

It is difficult to ascertain the **costs of partial shipments** under the special order type. When the product is of sufficient size and value, special studies will develop proper allowances for partial shipments. However, under ordinary circumstances there is too much detail and too great a volume of work involved in ascertaining the cost of partial shipments to make it practical. It is customary, therefore, to wait until an order is completed before determining the cost of the units comprising it. If the product is made up from parts manufactured in the plant, the partial shipment problem is very difficult because usually the assembly work is started when a sufficient number of the component parts have been completed and it is not unusual to find that some of the finished product has been assembled and shipped on customers' orders before the production orders for all of the parts required have been completed. Perhaps the best method for overcoming the difficulty of costing partial shipments is to use a carefully prepared estimated cost until the actual cost of the completed order is ascertained, or to subdivide the main order into a number of smaller production orders.

Under the special order system it is customary to make the good pieces finished on each order absorb the entire cost of the order. If the order was for 100 units and 10 became defective in the manufacturing process, the **total cost of the order** would be divided by 90 to determine the unit cost of each finished piece. In some industries it is customary to credit the orders with the scrap produced at **scrap value.** In other industries the materials credited to the individual orders may amount to more than the material absorbed in the cost and the nature of the materials used makes it possible for the returned material to be used in regular production. In such cases the orders are charged with the entire value of all materials drawn from stores and credited with the full value of the material returned in good condition.

The special order type of cost system is of little value for any purpose other than the **setting of selling prices.** Other types of cost systems furnish much better information for managerial control and can be maintained with a much smaller clerical force. There appears to be a **gradual abandonment of the special order type** of cost system in the larger industries in favor of simpler and less detailed methods of cost determination.

CLASS TYPE OF COST SYSTEM.—The class type of cost system can be used advantageously in **plants making relatively small lots of various products** and as a supplemental system in certain departments. It has been successfully operated in jobbing foundries where small work is done, in novelty manufacturing concerns, in heat treating departments, grinding shops, and in companies where the variety of goods produced was too great to permit an analysis of individual products. Under this system a monthly cost is obtained for each class into which the products are grouped. The system eliminates much of the detail work of the production order method and has the advantage of providing prompt and reliable information for the setting of selling prices if the goods have been well classified. The direct object of the system is to furnish **managerial statistics** and to ascertain if the company is realizing the expected profit on each class of products. (Fig. 1.)

Factory Unit Type of Cost System.—A **modification of the class cost system** is the "factory unit" basis under which all products are grouped into **weighted classes,** the weight factor in all cases representing the degree of difference in making the article as compared with the standard used. The total operating

cost of the department is divided by the total number of compound "factory units" produced during a month, and the unit cost for each class is determined by multiplying the average unit cost of the compound factor by the class factor. The direct material cost is omitted from the calculations and is determined on an arbitrary or estimated basis.

MONTHLY COST SHEET

CLASS.....

	Month	Month	Month
Direct Labor—Dept. 1			
Burden.....%			
Direct Labor—Dept. 2			
Burden.....%			
Direct Labor—Dept. 3			
Burden.....%			
Other Items			
Total Labor			
" Burden			
" Material			
Total Factory Cost			
Actual Selling Exp.			
" Admin. "			
Total Cost			
Sales for Mo. (Shipments)			
PROFIT			
Percentage of Profit			

Fig. 1. Monthly Cost Sheet Used in Class Type of Cost System

PROCESS TYPE OF COST SYSTEM.—The process type is the **simplest form of cost system** because it consists of dividing the total expenditures by the total units produced, as shown in Fig. 2. It can be used effectively when the final costs of the product can be expressed in units of quantity, such as tons, barrels, hundreds and the like. This type prevails in chemical plants, moulding departments of foundries, galvanizing, various types of mining, certain types of pipe production, stone quarries, newsprint production, cloth production, oil refining and certain types of steel and iron mills. The costs should be analyzed by major operations, by departments and by different types of materials. Under this type of cost system, monthly physical inventories are usually taken to prove the costs.

The **most troublesome feature** of this type is the **proper treatment of by-**

products which are an important factor in many industries using this system. No definite rule can be laid down for the treatment of by-products because the character of the items varies with the conditions and customs which prevail within the business or industry. By-products may be sold without further handling; they may be processed into salable products; or they may become raw materials of subsequent operations. Under good accounting practice the costs of the main products are credited with the fair market value of the by-products. In other cases, where by-products are sold, the income realized from the sale of the by-products is considered as a miscellaneous income item and not a credit to costs. When additional labor is expended on by-products

PHENOL PROCESS COST ACCOUNT

YEAR.....

	Month.....		Month.....	
	Total Cost	Cost Per Lb.	Total Cost	Cost Per Lb.
LABOR				
P–1 Sulphonating				
P–2 Work on lime vats				
" 3 Break fusion coke				
" 4 Acidulating				
" 5 Distilling				
Etc. for all major operations				
TOTAL LABOR				
BURDEN				
P–15 Foremen and assistants				
" 16 Clerical expense				
" 17 Idle time				
" 18 Maintenance acidulator equipt.				
" 19 " sulphonating "				
" 21 Supplies				
Etc. for all proper burden items				
Proportion of Gen. Exp.				
" " Power "				
" " Depre., etc.				
TOTAL BURDEN				
MATERIAL				
Benzol.....gal. @				
Sulphuric acid.....gal. @				
Caustic soda.....gal. @				
Etc. for all direct material				
TOTAL MATERIAL				
TOTAL COST				
Add —"W. in P." inventory value 1st of mo.				
Deduct— " " " " end " "				
TOTAL COST OF MONTH'S PRODUCTION				
Phenol produced				

FIG. 2. Monthly Report of Costs in Process Type of Cost System

to put them into marketable condition, all additional costs should be charged to the by-product, and when the by-products are processed into finished goods the market value of the by-products should be treated as a part of the material costs of the product.

In the process type all **wastage and spoilage** is absorbed in the cost of good production. For managerial purposes, however, it is advisable to provide waste reports showing an analysis of the kind, quality and quantity of waste.

PRODUCT TYPE OF COST SYSTEM.—The product type of cost system may be considered as a **modification of the class type** in which each product is a class. In the product type no attention is paid to individual order numbers because all elements of cost are charged directly to the product's name or symbol. This type of system is applicable to nearly all **companies manufacturing a regular line of products.** It can be used to advantage in industries manufacturing standard catalogued lines of goods and making the same parts over and over again. It avoids the difficulty of isolating the individual production orders for identical products continuously in process. It has been found advisable in some instances to discontinue the use of production order numbers and to control both costs and production on a monthly basis.

When the product type of cost system is used, the fluctuations in the work in process inventory are frequently ignored and **long-time average costs** are used in determining managerial policies and decisions. Where the materials involved are of sufficient value, a progressive record is maintained whereby the materials are transferred from one group of operations to another and the waste determined for each group. This method is particularly valuable where there is considerable spoilage or defective work upon valuable materials.

An example of the application of the product type of cost system under conditions where it is desirable to know spoilage is in the watch industry. The method of treating the costs under these conditions is best illustrated by the summary shown in Fig. 3, in which the figures used are for very small quantities for the sake of simplicity, although in actual practice the quantities handled are usually very large.

The most important point to be considered in this illustration is the **absorption of labor and overhead loss** on all preceding operations which have accrued at the time the articles are spoiled—for example, on the fifth operation. By dividing the total cost of this fifth operation by the quantity finished good at that operation, the cost for that operation is obtained, including the absorption of the loss on that operation. It is then necessary to absorb the labor and overhead loss for all preceding operations on the parts spoiled. This is done by multiplying the number of pieces spoiled by the **cumulative unit cost for the preceding operation,** thereby arriving at the unit labor and burden loss on the spoiled pieces for all preceding operations. The total labor and burden loss on all defective work throughout the group of operations, divided by the final good production at the last operation, gives the labor and burden loss to be applied against each unit finally finished. This loss added to the total cumulative unit cost equals the total labor and overhead unit cost for the finished production, including the absorption of all labor and overhead losses. To this is added the unit material costs, determined by specification, in order to arrive at the total unit factory cost. The direct material cost is usually determined by applying standard waste percentages which are verified from time to time by the accumulation of waste as shown on the product cost card. In some instances special studies are made to determine the waste percentage. This is sometimes done by accumulating and carefully weighing or counting all waste produced within a given department.

COST CARD

DESCRIPTION..... PRODUCT OR PART NO. .....

PERIOD..... .....INCL.

Dept.	Operation	Total Quantity	Labor	Burden %	Burden	Total Lab. and Burden	Cost Each	Cumulative Cost Each	Quantity Defective	Labor and Burden Loss
1	Boring	100	$10.00	100	$10.00	$20.00	$.200	$.200	8	$1.60
2	etc.	90	4.50	150	6.75	11.25	.125	.325	10	3.25
2	—	80	4.80	150	7.20	12.00	.150	.475	—	—
3	—	90	7.20	200	14.40	21.60	.240	.715	—	—
3	—	85	.85	200	1.70	2.55	.030	.745	5	3.73
3	—	75	6.75	200	13.50	20.25	.270	1.015	—	—

Material Cost (Each) Description—Qty.—Price	Amount				
		TOTAL	$1.015	TOTAL Final Qty. Good	$8.58
		Add—Loss per Unit Good	.114		75 pcs.
Material is by Specification		Total Labor and Burden Per Unit—Good	$1.129	Loss Per Unit Good	.114
Total	$.60	Material Per Unit Good	.780	This "Loss Per Unit Good" is added to total cumulative Cost.	
Add 30% for Loss	.18	Total Factory Cost Each	$1.909		
Material Cost Per Unit Good	$.78				

Fig. 3. Cost Card in Product Type of Cost System

The percentage of loss for material is arrived at by considering 23 defective against 75 finished goods. The fact that more pieces were finished in the fourth operation than in the third illustrates the lay-over of material. In a product cost system, the operation is considered only, as there are no order numbers to distinguish various groups. The number of pieces finished and the number found defective in all operations form the basis for the calculation of unit costs.

In the above-mentioned illustration, inventory fluctuations are ignored because of the expense involved in determining the actual inventory, and also because of the comparatively small fluctuation in the actual amount of work passing through the shop at any time. Long-time averages are used, thereby averaging out inventory differences. In fact, with a system of this type, it is customary to draw off the costs only from time to time to verify the so-called **standard costs** which have been adopted and which usually are used for an entire year without variation.

Such a system gives very good comparative data with a minimum amount of clerical expense, and furthermore, the system is so flexible that it can be operated to such degree of completeness as conditions warrant. The **current control** as to whether products are going through as efficiently as they should, can be exercised by watching **daily or weekly departmental production reports.**

OPERATION TYPE OF COST SYSTEM.—The operation type should be used where the difference in cost in performing an operation does not vary greatly between the different products worked upon, and where a large variety of products pass through similar operations. This method can also be used effectively where the direct material does not change appreciably during the operation, and in those industries where the direct material cost is determined by specification or bill of material. It can, however, also be used where the direct material does change during the operation, and where there is considerable spoilage, provided a proper mechanism is established for obtaining material costs separately from the operating cost.

The operation type has a **wide application. Unit costs** are found by dividing the total labor and expense of operation for a given period by the total number of units passing through the operation. Unlike the process type, only one or two elements of cost can be divided by the same unit. Sometimes it is labor only; other times labor and overhead. Direct material is seldom a factor, because operation costs are used principally in cases where little or no material is added during the operation.

While the operation type of cost system is sometimes used for an entire industry, it is more commonly used for the costs of certain groups of operations. It is applied to operations which are relatively inexpensive per unit of product, and in which the workers change frequently from one product to another, or work on a number of different products at short intervals.

Ordinarily the operation type does not distinguish between direct and indirect labor or material, except for managerial purposes. It is concerned chiefly with the total labor involved in an operation and the supplies incidental to that operation. The operation is usually charged with its proportionate amount of power, supervision, and the like, and in effect it absorbs its proper share of overhead.

EXAMPLES OF OPERATION COSTS.—An example of the operation type of cost system is one used in the manufacture of **fishing reels,** which requires a series of operations during which the gears are ground together until a satisfactory smoothness of operation is secured. The length of time required to grind-in a set of gears varies considerably in any one grade of reels, and different operators work on all grades of reels at the same time. They work in such a manner that it is impossible to allocate their time to the different reels. In these operations no materials are added to the product. Consequently the direct material item is not a factor in the determination of costs.

In this case the total cost of the gear grinding department for each month is divided by the total number of good reels finished, to determine the average

cost of each for the gear grinding operations. In the final cost calculation only the total unit cost for gear grinding is used, but for managerial purposes the cost of grinding is **completely analyzed on a comparison basis,** showing the labor, supplies, maintenance, etc., applicable to each of the operations within the group. This statement provides the management with information re-

30" x 3½" Fabric Tire

COST SHEET

(All figures are "Cost per Tire")

Dept.	Mo.... Unit Cost	Mo.... Unit Cost	Mo.... Unit Cost	Etc. Mo.... Unit Cost
4 Making (Direct Labor Cost)				
Finishing " " "				
Dept. 4 Burden on above .....%				
5 Curing (Direct Labor)				
Dept. 5 Burden .....%				
6 Trim Tread Rind (Direct Labor)				
Dept. 6 Burden .....%				
7 Wrapping (Direct Labor)				
Etc.				
Total Labor and Burden				
Material (By Specification—Per Tire)				
.....# Booked Rubber Fabric No.....@...				
.....# No. .... Side Wall @.....				
.....# No. .... Filler Strip @.....				
.....# No. .... Tread @.....				
..... Bead				
Etc.				
Total Factory Cost				
Deduct .....# Scrap (Per Tire)	Std.Amt.	Std.Amt.	Etc.	
Net Unit Cost				
No. Tires Finished				
Tot. Debit Amount to Tire Stock Account				

Fig. 4. Cost Sheet for Operation Type of Cost System

This Assembled Cost is made up from individual operation costs for "Curing," "Trim," etc. The unit operation costs for the first two operations are taken directly from time tickets charged by tire sizes. The balance of the operation costs comes from the cost sheets as shown by previous sample, there being one of those for each operation. The parts shown under "Material" as Side Walls, Treads, etc., are first costed on cost sheets similar to the above, and then the monthly unit cost results used as under "Material" on the tire cost sheet. The parts are costed using "operation" costs for compounding, calendering, etc., which operations apply only to the parts and not the tire as a whole.

garding the number of reels finished and the average cost of such reels, together with sufficient detail to determine the cause for any exceptional increases or decreases in the number of reels finished for a given expenditure.

In this particular instance the operation type of cost system was used instead of the class type, because there was not a sufficiently great variation in the quality of reels made to warrant a segregation into different classes. It is

apparent from this illustration that the main distinction between the operation and the process type of cost system is that direct materials are an important factor in the latter, and are not even considered in the former.

Another illustration is the "curing" costs in the **rubber tire industry.** The total costs of curing cord and fabric tires are compiled separately, and each total is divided by the number of tires of the respective kind cured during a given period, thereby arriving at a "curing" cost per tire. In this industry the operation type can be used generally, and direct material costs are determined largely by specifications.

The operation type of cost system can be used, because of its nearly **universal adaptability** to specific problems, in practically any industry or business. Fig. 4 illustrates a form of cost sheet for the operation type of cost system.

COST ACCOUNTING NOT AN EXACT SCIENCE.—Cost accounting is not an exact science and the exact cost of a manufactured article can seldom be obtained. The effort, therefore, should be to see that the cost accounting routine is executed intelligently so that **reasonably correct figures** may be secured. Any endeavor to be meticulously exact is likely to delay and obscure needed information. The cost of many items must be based upon close estimates which are accepted as substantially correct, and a considerable part of the cost is made up of overhead expenses which must be distributed to the product upon some general basis. It is much more important to have the cost accounting directed and supervised by one who has had sufficient practical experience to detect and adjust misleading cost figures that may result from clerical errors than to have a cost department head who lacks the practical viewpoints and who consumes considerable time and energy in trying to secure exact computations on relatively unimportant items.

NECESSITY OF COST INFORMATION BEING CURRENT.—One of the main requirements of a good cost system is that it should furnish cost figures promptly. It is sometimes advisable to sacrifice a certain amount of detail if necessary, in order to speed up the preparation and presentation of the cost figures. The **most useful cost figures** are those which are prepared daily or weekly, because if such figures indicate uneconomical shop conditions immediate corrective action may result in substantial savings. Cost figures which are prepared and submitted long after the production operations have been completed are of historical value principally. It is difficult for the shop executive to recall the operating conditions which existed at the exact time that such an order was passing through the factory.

SELECTION OF COST DEPARTMENT HEAD.—The selection of a capable acting head for the cost department is really **of greater importance than the selection of the system.** The most carefully designed procedure will fail if it is not operated with intelligence and vision. Too often the person responsible for the cost accounts is of the mechanical type or one who lacks an understanding of practical operating features and fails to appreciate the purposes for which costs are ascertained and used. Such a person has but little conception of the best form of presenting the cost results to the management. The collection and presentation of cost figures is so important to the intelligent conduct of a business that every effort should be made to secure the best ability available for the management of the cost department.

USE OF STANDARDS.—Cost figures in themselves have but a limited use. Hence provision should be made for **comparisons of actual costs with carefully prepared standards.** Standard costs may be predetermined from an intelligent study of the present and prospective operating conditions and a

review of past experiences. Standard costs are used as a gauge to determine whether the actual costs are over or under expectations. Comparisons of the actual costs of various periods are inconclusive because, as a rule, no definite explanation of the variances between such costs is possible. With well determined standard costs the variances between the anticipated and the actual accomplishment are apparent and attention is focused promptly upon the factors which have caused the differences and should be investigated.

DEPARTMENTALIZATION IMPORTANT.—The departmental division of the plant is a deciding factor in determining the type or types of cost system to be used, because practically all costs originate in the departments. It is frequently found that a type particularly applicable to one department cannot be used advantageously in other departments. For example, it may be found advisable to install a special order type of cost system in the machine shop, a class cost system in the foundry and in the hardening and plating department, a process method in certain auxilliary departments, such as wire drawing or the melting and refining of metals. The nature of the departmental operations will indicate the most appropriate type for the departments.

CONSIDERATION OF CLERICAL WORK.—Another real factor in the selection of the type of cost system is the **volume and expense of clerical work.** One type may provide very comprehensive cost data of limited practical use. Too often the theoretical desirability of having certain information is accepted without question and without practical investigation of just how the information can be used effectively in controlling and reducing costs. The financial manager of a business should be "hard-boiled" when cost systems are discussed. There is nothing sacred about any one system. Many successful manufacturers have become so impatient over the delays and expense of the system in their plants that they have scrapped the cost department *in toto*. If a cost system cannot justify itself without argument, an investigation is in order.

Accounting for Labor

In accounting for labor in a factory, **three main considerations** must be kept in mind:

1. The accumulation of proper data by which the various workmen can be paid the **wages** which they have earned.
2. The accumulation of data whereby **direct** and **indirect labor costs** may be compiled in accordance with the requirements of the type or types of cost system in use.
3. The accumulation of data **for accounting purposes** whereby the control accounts in the general ledger may be debited and credited in the proper distribution of the payroll.

CLOCK CARDS.—The **basic record** in accounting for labor is the time book in construction work, and the in-and-out clock card in factories. These records are provided to record the exact time the worker spends in the plant.

TIME CARDS.—The next most important record in accounting for labor is the time or job card which is provided as a means of analyzing and distributing the total time recorded in the time book or on the in-and-out clock card. There are innumerable forms of time cards but fundamentally they are merely a means for recording the **actual time spent by each worker on each particular job** or phase of work. The time cards are used frequently as reports of the number of pieces worked on; the number of good pieces finished; the number

proved to be defective; the machine and operation worked on; the department worked in, etc.

LABOR DISTRIBUTION SUMMARY.—Another record necessary in the accounting for labor is the summary of **direct and indirect labor by departments.** This record forms the basis for the journal entries whereby the payroll account is credited and the various departments are charged with the proper proportion of indirect labor, and the work in process accounts are charged with the proper amount of direct labor.

PIECE-WORK RECORD.—A fourth record which sometimes is very important in accounting for labor is a piece work slip on which the actual production of a worker is recorded and approved by an inspector or foreman. Sometimes such data are included directly on the time cards above referred to.

ROUTINE PAYROLL AND COST PROCEDURE.—All time cards should be checked with the in-and-out clock cards, either daily or weekly, so that the total time recorded on the controlling record of the clock cards is properly analyzed and accounted for. After proof with the clock cards the time cards should be summarized by direct and indirect labor, and by departments, to provide summarized figures for use in making necessary journal entries. It is customary to post the time cards to the **permanent payroll records.** After the time cards have served their purpose in the preparation of the payroll and the monthly summaries, they should be sent to the cost department. The exact method of handling the forms varies considerably in different industries, and even within one industry, depending upon the views of the person directly in charge of such work. Sometimes the labor costs are accumulated from the time cards on distribution sheets, from which they are distributed directly to the cost cards.

Wage rates and piece rates are usually applied in the payroll department, which also extends the time at the proper rate in order to determine the total pay due each worker. This information, summarized in a different manner, is also used by the cost department in accumulating the costs. **Labor distribution sheets** are used particularly in construction work and in process industries.

The distinction between direct and indirect labor is merely arbitrary. The shop ordinarily distinguishes between direct and indirect labor in accordance with the nature of the work being done. However, the cost distinction between direct and indirect labor is an entirely different matter and is based on costing conditions. For example, in the terminology of the shop a workman stamping numbers on products would be considered a direct worker because he is working directly on the product. From a cost accounting point of view such a workman would very probably be considered an indirect worker, because he changes so rapidly from one product to another that it would be impracticable to attempt to split his time between the various orders or products, and it is, therefore, thrown into overhead. In a process cost system or an operation cost system, the distinction between direct and indirect labor is not necessary for costing purposes, but it is made for managerial purposes on the basis of ordinary classifications for shops.

LOANED WORKER.—In most factories it is customary to assign workers to a certain department, which may be regarded as their **home department,** and it is desirable to give a worker only one pay envelope, under the jurisdiction of his home department. Various cost accounting procedures have been developed to account for **transfers of direct and indirect workers** from the home department to a department to which the worker has been loaned. In some cases the

HOLDEN MANUFACTURING CO.

BOSTON, MASS.

PAY-ROLL SHEET

DEPT. _____ CHECK NO. _____

NAME _____ RATE _____ PERIOD _____

DATE	SLIP NO.	CHARGE	TRANSFER			DIRECT				INDIRECT				O. D. STANDING ORDERS				TOTAL		
			Hrs.	Min.	Amount	Hrs.	Min.	Amount	Pce Work	Hrs.	Min.	Amount	Pce Work	Hrs.	Min	Amount	Pce Work	Hrs.	Min	Amount

overhead of the home department is applied on work done by indirect workers in other departments. This is particularly true with **maintenance workers** whose work in such cases bears the overhead of the maintenance department. The workers' payroll records should be accumulated under the home department heading, and be distributed in the cost records to the various departments affected. A **payroll sheet** is shown in Fig. 5. The **payroll summary** which is used for journal entry purposes must show the distribution of transferred labor.

Accounting for Materials

STORAGE.—Material control is a very important factor in practically every manufacturing or construction activity. Materials should be systematically stored in well arranged storerooms or yards under the jurisdiction of authorized storekeepers. In **manufacturing establishments** it is customary to have separate storerooms for supplies, raw material, finished parts, sub-assemblies, finished stock, etc.

STOCK RECORDS.—The amount and value of the stock in the storeroom should be recorded in stock records, and the records should be controlled by accounts in the general ledger. No goods should be received in the storeroom without notification to the stock records clerk by means of a receiving report or some other suitable form. Goods should be issued from the storeroom only on a **signed requisition,** which is transmitted to the stock records clerk for posting on the stock cards.

The stock records are not merely accounting records or cost accounting records, but are also used by the production and the purchasing departments. They are sometimes maintained **on a quantity basis** only, but in most modern installations the **unit prices or costs** are entered also on the stock records. It is now generally recognized as **poor practice** to have the stock records kept in the storeroom by the storekeeper. **Modern procedure** places them in the general office for the convenience of the production, purchasing and cost departments, and as a check on the storekeeper. The storekeeper's function is that of proper physical segregation and care of stock and the receiving and issuing of materials upon the proper authorization as shown by recognized forms of receiving reports or issue slips. Good storekeepers are often very poor bookkeepers.

STOCK CARD.—The basic record in cost accounting for materials is the stock card (Fig. 6). The actual form of card or sheet will vary considerably with local conditions, and is of relatively minor importance as compared with the proper enforcement of a well laid-out plan for controlling materials. It is customary to have a separate stock card or sheet for every item of material in a storeroom. The simplest and most popular form of stock record, although criticized considerably in recent years, is provided with columns for showing only **receipts, disbursements** and **balance** of stock on hand at any one time. Sometimes cards of this type are provided with Price and Amount columns. Some of the more modern stock cards are provided with columns for recording goods ordered, requirements for orders received, and materials appropriated to various orders. It is customary to have subheadings under each column for dates, order numbers, quantities, prices, and amounts.

RECEIVING REPORT.—The receiving report is an essential record in the accounting for material. This serves as an automatic notice to the stock record department of the quantities and prices of the goods received. The receiving report should show the **location** of the goods and any **transportation charges**

HOLDEN MANUFACTURING CO.
BOSTON, MASS

STOCK RECORD SHEET

NAME OF ITEM _____ KIND OF MATERIAL _____

STOCKROOM _____ RAW MAT'L. REQUIRED—SIZE _____ KIND _____ UNIT _____

SECTION _____ MADE FROM _____ USED FOR _____ WGT. EA. _____

SHELF _____ BIN _____ YEAR | | | | | | | | CONVERTING RATE _____

QUAN. | | | | | | | |

ACCOUNT NO. _____ PRINCIPAL SOURCE OF SUPPLY _____ TIME REQUIRED TO GET _____

REQUIRED	
JAN	JULY
FEB	AUG
MAR	SEPT
APR	OCT
MAY	NOV
JUNE	DEC

SIZE _____
TYPE _____
CUBIC SPACE _____
SYMBOL _____

DATE									
MAX									
MIN									

REQUIREMENTS			APPROPRIATED				ORDERED				RECEIVED						ISSUED								ADJUSTMENT	
For What	Item	Total	For	Item Total	Item Quan.	Total	Date	Order No.	Item	Total	Date	Order No.	Item	Total	Price	Amount	Date	Order No	Item Misc	Item Shipped	Total	Price	Amount		Over Credit	Under Credit

which have accrued thereon. Sometimes the receiving report covers quantities only and is accompanied by an invoice which gives the necessary cost information. The unit price applied to the stock records usually includes transportation charges.

REQUISITION.—The third most important record involved in controlling the materials is the requisition or issue slip, which is the authorization for the withdrawal of material from stock. In all cases the issue slips should show the **order number** to which the goods are to be charged when issued, an exact **description of the material** to be withdrawn from stock and the exact **quantity** issued. A provision should be made on the material requisition slip for inserting unit and total prices to show the amount or value of the goods delivered from stock. All material issue slips or requisitions should be **signed by an authorized person,** such as the foreman or production manager.

The **material credit slip** is practically a copy of the requisition. Different colors are used to help make a proper record of the return of materials to the stockrooms from the factory.

Bills of Material.—Bills of material or material specifications are coming into more prominent use as material requisitions, because their use eliminates the clerical work entailed in the copying of a large number of items on individual requisitions. Different materials from one stockroom may appear on one requisition, but it is seldom good practice to place items on one requisition for more than one production order. This is true regardless of the type of cost system used.

Indirect Materials.—All issues of indirect materials or supplies are charged to the departmental overheads or to various expense accounts rather than to production orders.

LOT METHOD OF ISSUE.—When prices are maintained on stock records, it is customary to have the stock record clerks enter the correct prices on the material requisitions at the time they post the issuance of materials to the stock records. The most accurate way of applying prices is on a lot basis. That is, if 1,000 pieces have been received in stock at a price of 10 cents each, and another lot has been received subsequently at a price of 15 cents each, the 10-cent price will be used until 1,000 pieces have been issued. Subsequently the 15-cent prices will be used until another 1,000 pieces have been issued. In some instances, however, the use of **average costs** instead of lot prices is preferable. A modern development in the pricing of requisitions is to use **standard prices.** In such cases it is necessary to accumulate the actual cost in order that the differential between actual and standard may be determined and applied accurately every month.

RUNNING TOTALS.—Some cost accountants advocate the use of running totals on stock records instead of balances. The theory of this practice is that information such as the **total received** and **total issued** since a given date is more frequently required than the balance on hand. Furthermore, the clerical work in obtaining running totals is simpler than the continuous subtraction which is necessary in obtaining balances. Either method may be used, depending on the local conditions encountered and the likes and dislikes of the executives using the records.

DUAL PURPOSE OF RECORDS.—As in accounting for labor, the basic records controlling the flow of materials through a factory, such as the receiving report and the material requisition, serve a dual purpose in that they must be used for both **cost purposes and for general accounting.** The requisitions

should be summarized on accumulation sheets to provide a basis for the proper journal entries in the general accounts at the end of the month, after which they should be sorted by order number, product, operation, etc., for cost purposes.

The general practice is to charge the cost of special materials directly to overhead or other appropriate accounts rather than put them through the storerooms and stock records. In some companies, however, the definite practice of putting all materials through storerooms even though the materials may be specially ordered for maintenance purposes is established.

In many cases it is not considered advisable to attempt to control certain classes of materials in the customary manner. For example, boxes and shooks, shipping lumber and certain types of miscellaneous supplies are frequently charged off to expense as received or, if the cost is relatively great, the amount to be charged off is prorated over a given number of months, usually depending on the estimated length of time it will take to use up the materials.

MATERIAL CONTROL SOMETIMES DETAILED.—While the correct control of materials has been generally neglected in manufacturing establishments, certain companies, on the other hand, have gone too far in attempting to control materials. This is particularly true in some of those industries using materials of relatively low value and in small quantities per order. An advantage of the class type of cost system is that materials can be charged to the various classes in relatively large quantities, thereby greatly simplifying the clerical work involved and yet providing a correct analysis of costs.

It has been found advisable at times to forego a detailed accounting of the material, even though the material is of considerable value, because of certain physical difficulties. In textile industries, for example, especially in weaving silks, serious obstacles in obtaining correct detailed accounting control of materials are encountered because the weights of the materials vary with the humidity in the air and the actual weight of the silk on the spools and bobbins must be approximated by deducting estimated weights of the spools and containers. Such complexities are often understood imperfectly and ridiculous cost results are obtained with the ordinary type of detailed inventory control. This problem has been solved by carefully estimating the quantity of raw material required to make each order of finished goods, and by keeping an accurate record of the aggregate of materials used as compared with the materials called for by the estimate. This method at least gives an accurate determination of the over- or under-absorbed raw material costs, and therefore, provides a guide to determine the effectiveness of the estimating department.

The main function of the **estimating department** is to provide prices for the selling department. The cost department checks the estimating department. When such a system is used, it is difficult to prevent theft by means of accounting records because of the physical difficulties already spoken of. The best solution of the theft problem is good supervision and watchman service. In the handling of **precious metals** it is customary to charge the workmen with the full value of the metal issued to them and to require them to return approximately the same weight in the form of finished work, scrap, unused material, etc.

It is customary to charge off **office supplies** and supplies of a similar nature in fairly large quantities, and then issue such materials in small quantities as needed and without the use of requisitions. In such cases good supervision is far more effective than an attempt to maintain detailed accounting records over materials of such small value. This is particularly true where the ultimate consumption of the materials is in small units.

PHYSICAL INVENTORIES.—Stock records should always be verified by periodical physical inventories. In the ordinary manufacturing establishment this is done once a year, preferably at the end of the fiscal period. When possible, the date of closing should correspond with the time of year when inventory stocks are at their lowest.

In some instances methods are employed whereby the stock records are **continuously verified.** This may be done by a group of men who do nothing but continually check stock and correct differences on the stock cards where necessary. The work is usually so laid out that the stock checkers can cover the entire inventory in a given period such as 6 months or a year. In other cases it is customary to have the storekeeper report the balance of stock on hand on every requisition coming through, which automatically notifies the stock clerk of the exact amount of material remaining on hand and thereby enables him to verify or adjust his stock records. Any substantial unaccounted-for differences should be reported to the accounting executive.

The most important thing about the taking of a physical inventory is **planning and organizing** for the work. Instructions should be compiled showing who shall be responsible for the inventory, what shall be taken, how it shall be classified, how it shall be taken, how it shall be priced, etc. When **differences in inventories** are discovered, it is necessary to maintain a record of adjustments in order that proper journal entries may be made. This is sometimes done directly on the individual stock record cards, in other cases on separate records, and sometimes on summary sheets placed with the stock cards, one sheet for each group of stock cards in accordance with the accounting classification. Adjustments should be charged or credited to an inventory adjustment account, the proper offsetting entries being to the proper inventory control accounts. A **trial balance of the stock cards** should be made from time to time so that they balance with the controlling accounts in the general ledger.

SCRAP AND DEFECTIVE WORK.—In some industries scrap and defective work must be given careful consideration. Defective material received from the vendor should be returned to the vendor or repaired at the vendor's expense. Scrap is generally divided into two classes, avoidable scrap and unavoidable scrap. **Avoidable scrap** may be caused by an operator's carelessness, by errors in drawings, defective tools, obsolescence, etc. **Unavoidable scrap** may be considered as borings, turnings, waste, sweepings, punchings, certain types of obsolete materials, and worn out materials and equipment. Many industries maintain **salvage departments** for the purpose of recovering scrap and correcting defective materials to the best advantage. In some cases the accounting is handled by charging all scrap materials and salvage labor and expense to a **scrap account,** which in turn is credited with the sales of scrap materials, and with the original cost value of materials which have been restored to full usefulness. Any balance in the account is absorbed in the profit and loss account at the end of the year.

In most factories it is considered advisable to **label all scrap** or rejected materials with tags of a distinctive color. If a special order cost system is used, the scrap or salvage tickets should show the order number, the quantity rejected, the reason for rejection, etc., and a copy of the tag should be turned into the cost department. In some factories salvage work is only undertaken when authorized by a special salvage order.

Production orders are sometimes credited with the scrap produced on the orders, particularly in stamping irregularly shaped pieces out of sheet brass, sheet aluminum, etc., where the scrap metal is a material factor in the cost. In rare instances the scrap is credited to production orders at original cost

alue. However, in general practice the credit is on the basis of current scrap alue of the materials turned back to the stockroom as scrap. With the exception of automatic screw machine products, borings, turnings, and the like are ot valuable enough ordinarily to be credited to production orders. Sales of uch scrap may be cleared through a scrap account, credited to overhead, or aken as miscellaneous income. The problems which arise in connection with ccounting for scrap are innumerable, but one important point to consider is he proper **clearing of the work in process accounts** and the various stock ccounts in the treatment of scrap, particularly when materials are declared bsolete, or an excessive supply is disposed of by direct sale.

Where **assembly costs** are built up from standard unit part costs, it is ecessary to provide for the absorption in the cost of pieces spoiled in assembly, nd replaced from stock. If too much detail is involved to permit the charging f replacement parts direct to the products or orders, all defective parts may e segregated and tabulated at the end of the month. The total value of the lefective pieces at original cost should be determined and total cost should be harged to a special account which may be called a **"replacement" account** and vhich preferably forms a part of the overhead in the department under consideration.

STORAGE CHARGES.—Usually it is impractical to distribute storage harges over the materials stored upon the basis of weight or values. Such harges are more conveniently handled by including them directly in overhead. **nterest on investment** is not ordinarily considered a proper item of cost in ccounting for materials.

MAXIMUM AND MINIMUM STOCKS.—In order to insure an adequate upply of standard parts and yet not tie up too much money in stock, it is dvisable to set maximum and minimum limits on all stock items. Whenever he stock on hand reaches the minimum, the stock clerks are instructed to put hrough a purchase requisition for more parts. The limit of amount to order is ndicated by the maximum which has been established for the goods under onsideration. An historical record of the goods consumed in six months or nnual periods should be recorded on each stock card in order to provide a asis for determining the maxima and minima. Maxima and minima should ppear on each stock card for convenience in reference.

In **establishing maxima and minima** it is necessary to consider the length of ime required to secure the goods either from vendors or from operating departments, the probable supply required to meet production, the economical quantities to buy or produce, and finally the storage facilities. The establishment of he proper minimum is particularly important where the article under consideration is used in a large number of different products. The maximum and ninimum requirements should be subject to **frequent revision** to conform to arying conditions.

EQUIPMENT RECORDS.—Small tools consumed in operations and generally called **perishable tools** are usually included in the supply inventory and re controlled by means of stock records in the ordinary manner. However, **achinery and equipment** should be analyzed with the aid of a **plant ledger** vhich discloses the original cost of each machine, the cost of installation, of ll additions, major repairs, etc. Such records are valuable as a basis for guring depreciation and particularly as a basis for calculating fire losses. In ome modern factories a complete set of plant record cards are maintained and sed to study and reduce the cost of maintenance.

The **plant ledger cards** are comparable to a cost card in that all labor and

materials used for **repairs and maintenance** are currently posted to these cards in order that a comparison may be made between the cost of maintaining machines with different types of operators and between the amount of maintenance required for machines of different makes but of the same type, etc. The ledger is also valuable in providing data whereby the profit and loss on the sale of old or excess equipment may be determined. If different **rates of depreciation** are used on different machines, the depreciation charged off in cost accounting should appear directly on the plant ledger card so that the exact residual value of the machine may be determined at any time. The plant ledger cards are controlled by accounts in the general ledger for machinery and equipment, and they should be balanced from time to time with those accounts. Care must be taken to see that the control account is properly adjusted when machinery is either bought, sold, transferred, or abandoned, and that the depreciation account is properly adjusted so as to eliminate the depreciation on the machines disposed of and to add depreciation for those acquired.

Factory Overhead

FACTORY OVERHEAD.—**Overhead** or **burden** is a general term ordinarily meaning the accumulation of indirect production expenses. **Departmental overhead** or burden is the indirect costs which may be directly allocated to operating departments, such as departmental supervision and clerical help, cleaning and sweeping, departmental tool room, labor, departmental maintenance, and supplies. **Expense** is a term ordinarily applied to those indirect costs which cannot be directly allocated to the operating departments, but which must be accumulated separately and prorated to the operating departments. Expense is ordinarily made up of such items as general supervision, inspection, receiving and shipping, power, light, heat, general maintenance, elevator service, water and gas. The term **"fixed charges"** is applied to certain items which come under the general heading of expense, and ordinarily refers to such items as depreciation, insurance and taxes.

DISTRIBUTION OF OVERHEAD.—The most vital part of any cost finding method is the proper allocation of the overhead expenses. The indirect or overhead expenses are often greater than the total cost of the direct materials and labor. Therefore, an arbitrary or unstudied distribution of the overhead expenses tends to nullify the large volume of careful detail work which is involved in compiling the direct material and labor costs. Most of the dissatisfaction with costs arises from a failure to distribute overhead properly. In general, overhead expenses should be segregated to various departments of the plant and then applied to the costs of the products which pass through the departments by the use of one or more departmental burden rates.

The **most common method of applying departmental overhead** to costs is as a **percentage of the direct labor costs** of the article. There are many cases, however, where this basis is not properly applicable, and **other methods** such as the rate per direct labor hour, the total direct and indirect labor costs, the machine hour rate, the gang rate and others, are used. The best methods of applying the overhead expenses to the product can be decided upon only after a survey of the existing operating centers, and the physical arrangement and equipment of each department and a study of each item of overhead expenses. Direct department expenses should be charged to the department affected and general expenses should be spread over all departments in an equitable way.

Departmental overhead rates can be obtained often as simply and with prac-

tically the same clerical expense as flat average overhead rates. The same work must be done in both cases, and the determination of departmental overhead is merely a matter of the subdivision of the data accumulated.

In determining departmental overhead rates it is very important to consider the **departmentalization from the costing point of view.** An existing departmentalization which has been made primarily for supervision, physical layout, and other operating considerations, may not be suitable for costing purposes. For example, an assembly department and a machine department may be considered as one department, but for costing purposes such a department should be divided into two departments, because the actual overhead rate on the direct labor in the assembly department will be less than the overhead rate in the machining department. Maintenance departments grouped for practical reasons with operating departments should be segregated for cost purposes.

Departmentalization should not be carried too far. It should be based on practical consideration rather than theoretical distinction. From the cost point of view, the basis of departmentalization should primarily be one of grouping together those functions and elements in the general scheme of production which are of such a nature that an arbitrary distribution of overhead can equitably be made on some basis to all products passing through a department. It is very frequently quite practicable and advisable to group together a considerable number of physically separate departments. For example, in one very large factory it was found that the relative length of time required for the products to go through the processing and the assembling departments were practically constant and therefore an overhead rate for the manufacturing departments and a rate for the assembling departments were all that were necessary.

ACCUMULATION OF OVERHEAD.—In accumulating overhead at the end of the month, it is usually best to distribute first the supervision and indirect labor to the proper departments. This can best be done in a practical way by assigning so-called **standing order numbers** to cover all classifications of indirect labor and expense. Indirect time tickets, after having served for payroll purposes, can then be sorted and filed away by standing order numbers, summarized at the end of the month and posted to the overhead work sheets by departments. Indirect materials can then be summarized by standing order numbers in the same manner and posted to the work sheet.

METHODS OF DISTRIBUTION.—The most common method of absorbing overhead into costs is to apply it as a percentage of the direct labor cost. While this method is most widely used, it is less accurate than an application upon the basis of a **flat rate per direct labor hour.** When the percentage of labor cost is used, highly paid skilled workmen carry more overhead than the lower paid unskilled workmen, notwithstanding the fact that the unskilled man actually consumes much more overhead in carrying on this work because of inefficiency of operation, larger amount of time and supervision needed, and greater spoilage. Overhead is sometimes absorbed on the basis of the **machine hours charged.** Under a modification of this plan, a general overhead is applied on a **departmental basis,** supplemented by a so-called super-charge for the use of certain machines or groups of machines.

DEPARTMENTAL BASIS ESSENTIAL.—Overhead should be applied on a departmental basis, because in most factories overhead percentages will vary considerably in different departments. The departmental variations affect true costs, unless all goods spend an equal amount of time in each department. If some goods skip certain departments, or spend a disproportionate amount of

time in other departments, the application of an average factory overhead rate will produce erroneous costs. For example, a factory may have two departments of equal size, with overhead rates of 150 and 50% of direct labor respectively, or a factory average overhead rate of 100%. Assume that in the processing of the product, product A takes twice as long in the first department as in the second department, and product B takes twice as long in the second department as in the first department. If the total direct labor costs on both A and B are the same, the total cost of each product, using the general factory overhead of 100%, will be the same. However, if the departmental overhead rates are used, it is apparent that the cost of B will be greatly in excess of A, because B spends twice as much time in the more expensive department.

Ordinarily there are certain **indirect materials** which are charged directly to expense and which are not put through the stock records. A convenient way to be sure that such expenditures are included in the overhead is to have the accounting department make out a so-called **expense debit slip** for all such items, giving the standing order number, the nature of the material or service purchased, and the amount. These slips can then be filed with the material requisitions and be entered on the overhead work sheet.

Special standing orders should be provided for all **items of maintenance.** Maintenance charges consist primarily of indirect labor, indirect materials and expense charges, and consequently are posted on the overhead work sheets. Whenever maintenance work is covered by separate individual orders, care must be taken that such orders are properly closed and included in the overhead compilation.

DISTRIBUTED EXPENSES.—The established departments should be charged with their proper proportion of depreciation, insurance, taxes, etc. **Depreciation, fire insurance and taxes** should be apportioned on the basis of property values, and **liability insurance** should be distributed on the basis of the payroll.

In most factories there are at least two general service departments, viz.: power, light and heat, and general expense. These may be subdivided into the power departments, the engineering departments, the superintendent's office, etc. These departments should receive their proper share of all items of indirect cost. Before the overhead of the operating departments can be determined, it is necessary to close and distribute the overhead of the power, light and heat departments and general expense departments. A departmental burden statement is shown in Fig. 7.

The columns or sheets for power, light and heat and for general expense are then summarized in order to determine the totals which must be distributed. Power, light and heat are distributed to the operating departments on the basis of their actual consumption. In large plants meters are used sometimes to determine an accurate distribution, but a more common practice, which is the result of necessity, is to have the engineering department make a practical estimate of the distribution of these items.

DISTRIBUTION OF GENERAL MANUFACTURING EXPENSE.—General manufacturing expense should be distributed to the operating departments on the **basis of total payroll,** because the items entering into general manufacturing expense fluctuate more with total payroll than with any other one factor. Some companies use total direct labor costs as a basis for the distribution of general manufacturing expenses, but in most cases the total payroll basis is more satisfactory.

After all the expenses have been distributed to departments, the departmental

DEPARTMENTAL BURDEN STATEMENT

MONTH.....

YEAR.....

Item	Standing Order Code No.	Normal	This Month	Last Twelve Months
INDIRECT LABOR				
Foremen and Assistants	1-100			
Inspection	1-101			
Handling Product	1-102			
General Labor	1-103			
Etc.				
TOTAL				
MAINTENANCE				
Machinery	1-110			
Buildings	1-111			
Tools	1-112			
Etc.				
TOTAL				
SUPPLIES				
Small Tools	1-120			
Oils and Waste	1-121			
Miscellaneous	1-122			
Etc.				
TOTAL				
PROPORTIONED CHARGES				
Depreciation	1-130			
Taxes	1-131			
Insurance	1-132			
Steam	1-133			
Power	1-134			
General Expense	1-135			
Etc.				
TOTAL				
GRAND TOTAL (ACTUAL BURDEN)				
No. Direct-Labor Hours				
Standard Burden Rate				
Burden Applied at Standard Rate				
Balance (difference between actual and applied) to Profit and Loss Account				

FIG. 7. Departmental Burden Statement

overhead rates can be determined. Journal entries may or may not be involved in the distribution of the charges of the service departments, depending upon the nature of the control accounts in the general book.

Standards

STANDARD AND NORMAL OVERHEAD RATES.—In modern cost accounting practice standard rather than actual overhead rates are applied in the costs. Predetermined standard overhead rates are used because it is necessary to cost orders before the actual overhead rate is known, and an overhead rate representative of average normal conditions is more reliable for price setting than the fluctuating monthly actual rates. The predetermined overhead rate also provides a definite basis of comparison with actual, and it can be used effectively by the management in controlling and reducing overhead. It is now a general practice in modern industries to provide the foremen with monthly statements of the overhead of their departments in order to secure their interest and assistance in the reduction of such expenses. When standard overhead rates are used it is important to determine the difference between the actual overhead and the total overhead absorbed in the costs at standard rates. The difference between the standard overhead absorbed and the actual overhead is then shown as **over- or under-absorbed overhead,** and is carried directly to profit and loss. For managerial purposes it is advisable to provide a table at the bottom of each overhead statement showing the actual overhead percentage for the month and the average percentage to date compared with the standard. The overhead statements can be used as a basis for journal entries in which work in process is charged with overhead at standard rates and a control account called "overhead absorbed" is credited. The actual overhead must tie in with the control accounts for overhead in the general ledger. In the general ledger the difference between the Overhead Absorbed account and the Actual Overhead accounts must agree with the sum of the over- or under-absorbed overheads as shown by the various departmental overhead sheets.

With carefully prepared standard overhead rates the over- or under-absorbed overhead is a manufacturing profit or loss. It must be borne in mind that the cost of sales would be increased or decreased by the amount of over- or under-absorbed overhead if the actual overhead was used instead in compiling costs.

Standard overhead rates are usually determined on the basis of practical experience and past records. In some cases they are worked out scientifically on the basis of a normal capacity of 80 to 85% of the theoretical 100% capacity.

Actual overhead rates fluctuate with the volume of production because a large proportion of overhead is relatively fixed. For this reason standards are valuable, particularly in setting prices, because with a decrease in the volume of production and with charges relatively fixed, the percentage of overhead applicable to direct labor on an actual basis increases considerably. Under such circumstances, if actual costs were used, the selling price of the goods would have to be increased radically at the very time that they should be maintained at a relatively low figure in order to attract business. When business is usually good and the factory is operating at more than normal capacity, the actual and relatively fixed overhead per unit of production will decrease and be less than the standard. In other words, standard rates permit prices to be set on the basis of fair average normal operations and not on the basis of temporary or abnormal conditions.

Standard overhead rates should be changed as often as necessary. It is not customary to change them more than once or twice a year. Any change in

standard overhead rate should be made effective at the beginning of a month in order that the cost department may make a clear-cut application of the new rate in the cost compilations. The date on which the work was done should determine the rate to use and not the date on which the cost compilation is made.

A factor which must also be considered in changing standard overhead rates is the **inventory on hand** at the time the rate is changed. Care must be taken to see that the various inventory accounts are not charged with stock including one overhead rate and credited with deliveries from stock at another overhead rate. In other words, the change in overhead rates must not inflate or deflate the inventory controlling accounts.

DISTRIBUTION OF GENERAL EXPENSE ON STANDARD BASIS.—The use of standards has been extended by some companies to cover the distribution of the general expense to the various operating departments. This method of distribution is particularly **valuable when business conditions are irregular** and certain departments are operating at full capacity as against other departments which are practically closed down. Under such conditions if the entire actual general manufacturing expense is distributed each month, the departments which are operating at full time will be charged with an abnormally high proportion thereof and the departments which are practically shut down will be relieved of most of the general manufacturing expense charges. This situation can be covered properly by the use of standard rates which reflect the charge per direct labor hour or direct labor dollar under normal conditions. The over- or under-absorbed general manufacturing expense should be carried directly to the profit and loss.

UNABSORBED EXPENSES NEVER AN ASSET.—Instances are known where debit balances in overhead expense accounts have been carried as an asset instead of being transferred to profit and loss. The reason given, that increased production may take care of the unabsorbed balances, is wholly fallacious. The only justification for carrying any deferred expense as an asset is that there is a continuing benefit running to the succeeding accounting period. When production cannot absorb the actual costs of a period there may be a detriment running to the next succeeding period; certainly no benefit arises out of subnormal operations. The principle applies fully to seasonal businesses and any others where there is a hope that one period will take up the slack of another. **Fiscal periods** should be arranged so that normal and abnormal conditions will balance within the period. If they do not, a concern is out of luck. Operating deficits cannot be carried as assets unless executives choose to assume the responsibility for false balance sheets.

STANDARD COSTS.—The tendency among modern cost accountants is to use standards in costs. Some prefer using as their standard one which may be described as an **"efficient standard"** which is, however, largely theoretical and which is rarely equaled in actual practice. Others use **estimated costs** based upon previous experience, as their standard costs.

STANDARD OF EFFICIENCY.—The first type of standard cost is set up from an analysis of an exceedingly good past performance but generally from actual time studies made of individual jobs. **Separate standards** should be set for **labor, material** and **overhead;** and labor cost, material cost, and overhead cost should be set for each article manufactured. The actual costs are compiled and compared with the standard costs.

This type of system is used in a number of industries for the purpose of showing the differences between the actual and standard costs. In the use of this system the differences between standard and actual costs must be shown in work

in process finished stock and cost of sales. This involves the running of two sets of records, one on a standard basis and the other on the actual cost basis.

In the use of the above method some cost accountants do not carry the differences between actual and standard through all the control accounts. They show on each cost sheet the standard of labor, material and overhead, respectively, as against the actual.

STANDARDS WATCHED BY PRODUCTION DEPARTMENT.—Sometimes it appears from a study of the standard cost system in use that the attempt is made through the cost system to control something which might better be controlled by the production department. The time to watch and control differences between standard and actual in direct labor cost is while the job is progressing through the factory. Simple production plans are in effect in a great many manufacturing plants wherein **standard quantities per hour** are expected for each operation and these quantities are shown on copies of the shop orders going to the factory departments. In these plants it is the function of either the timekeeper, assistant foreman, or dispatcher, whatever he may be called (according to the respective system in effect), to note the **actual performance** of the work in quantities per operation per hour, etc., immediately after the work has started. At that time the dispatcher or timekeeper notes the actual production against the standard and calls the foreman's attention to any great deviation. If any remedy can be applied, the time to do it is while the work is in process, and not after the order is completed and general cost summaries compiled.

In the ordinary manufacturing plant it would seem sufficient for the cost man to content himself with standardizing the overhead. That is, after all, the one element which fluctuates directly with the volume of production, plant capacity, etc. The labor can be controlled through the production department and the material used may be generally controlled through engineering specifications or "bill of materials." Where the production department performs the function of production control it is only necessary for the cost accountant to watch the expenditures and ascertain actual costs, using, however, standard and predetermined overhead rates.

ESTIMATED STANDARD COSTS.—The second general class of standards, known as estimated standard costs, is coming into general use. In an industry where the same line of products is made over and over, it seems unnecessary to cost each shop order or production run for the same article. The variations in actual costs should not be great because the elements of direct labor, material and overhead in normal times are about the same.

Standard costs, or "estimates" as they may be more properly termed, should not be attempted until sufficient actual cost data on an order basis or product basis have been found from previous experience. Such estimated or standard costs can be set up only from past results. The **object of this method** of using standard costs is to eliminate the vast amount of clerical detail in industries manufacturing a varied line of staple products or catalogue goods. The system, however, is somewhat dangerous if the work in process account is not watched carefully. The actual expenditures for labor, material and overhead enter into the work in process control, but the credits thereto are made at estimated cost of all articles completed. Unless care is exercised in the use of estimates, the work in process inventory account may require adjustment in a very short time. The personnel of the cost accounting department is very important. When a system of this kind is used it is largely a matter of judgment as to

whether existing shop conditions warrant the changing of the cost estimates. Standard costs should be changed as rapidly as conditions warrant.

Perhaps the best plan for most industries is to use a standard overhead coupled with some method of controlling the production as it takes place in the factory by comparing production standards with actual performance. In addition to this, a **financial budget** should be prepared from estimated costs based on past results and the total summarized actual cost compared with this budget weekly or monthly.

Control of Cost Records

NECESSITY FOR "TIE-IN" WITH GENERAL ACCOUNTING.—Cost accounting is frequently an outgrowth of the desire on the part of the foreman or superintendent of a factory to know something about the comparative costs on different products produced in the shop. At other times it is developed, in a tentative way, to provide the selling department with information for establishing selling prices. When cost accounting has been developed in this way, it is seldom that sufficient attention is given to the **relationship between cost accounts and general accounting.** The expenditures by a company are generally recorded accurately in its general accounts. In cost accounting the same expenditures should be analyzed and redistributed to appropriate cost accounts. If the general accounting and cost accounting transactions are not made inter-dependent, there is no assurance that all items of cost have been taken up in the cost accounts. Cost accounting usually involves a considerable volume of detail and without a definite method of summarizing and controlling the totals, it is impossible to tell if all expenditures have been accounted for.

The practical man who has developed a cost system for the shop's use or for the selling department's use, seldom appreciates the necessity of tying in the cost accounts with the general accounts. On the other hand, when a cost system has been developed entirely by the mechanical type of accountant, the costs are liable to be somewhat impractical for use by the operating organization even though they nicely tie in with the general accounts. In recent years real cost accountants, with the factory and accounting point of view, have entered the field and, as a result, modern cost accounting provides usable practical data for the operating organization, and at the same time ties in accurately and correctly with the general accounting.

In the large modern factory cost accounting is frequently divorced from general accounting both in location and supervision. The tie in between cost accounting and general accounting is maintained by means of a **series of control accounts** in the general books. A control account may be defined as one which shows in total the details found in a subsidiary record. For example, the raw material account in the general ledger may show that $500,000 worth of raw material is on hand. This is a control account for raw material, and is completely analyzed by means of the raw material stock records which show the exact quantity and value of material on hand. Ordinarily, the tie-in between the cost accounting and general accounting is maintained on a **monthly basis.**

The tying in of cost accounting with general accounting does not necessarily mean that the accounting procedures will be complicated. As a matter of fact, if the tying in is done correctly, the cost accounting is simplified, and the management is assured that the costs contain the charges which have actually accrued rather than only the actual expenditures. In some instances the tying in of cost accounting with the general books does increase the volume of costing work to be done, because costs have not been applied to certain departments or

operations for lack of a basis of applying them. This is particularly true where a cost system has been put in by an inexperienced person, not familiar with the various types of cost systems, and who merely stops extending his systems when he finds a department or a series of operations to which his method will not apply.

METHOD OF CONTROL.—The original expenditures for various purposes are accumulated in the **voucher or purchase register** from which they are posted to the controlling accounts in the ledger at the end of each month. This work is done by the general accountant. However, he is dependent upon the cost accountant for information relative to the distribution and use of labor, materials, and various other elements of cost. The cost accountant must, therefore, maintain summaries of direct and indirect labor, the consumption of materials by order number, by product, by department, of the work transferred between the storerooms and operating departments, records of goods finished and shipped, etc.

COST JOURNAL ENTRIES.—The **basic journal entries** with which the cost accountant is concerned are as follows:

1. **Labor.**—In this journal entry the indirect labor for the month is charged to the various departmental burden accounts and the direct labor to the various work in process accounts. The Payroll account is credited. Basis: payroll summaries.

2. **Material.**—In this journal entry raw materials and the like are charged to the various work in process accounts and indirect materials are charged to departmental burden accounts. The proper inventory control accounts are credited. Basis: summary of materials used.

3. **Expense Charges.**—This entry is made for the purpose of charging the various departmental burden accounts with their proper proportion of service charges and various expenditures for materials and the like which do not go through the material accounts. The credit may be to an Expense Ledger Control Clearance account. Basis: voucher register.

4. **Taxes.**—In this journal entry the departments are charged with their proper proportion of prepaid taxes and the Prepaid Taxes Control account is credited. Basis: schedule of taxes.

5. **Insurance.**—The journal entry covers the distribution of liability and fire insurance to the various departments with the credit to the Prepaid Insurance Control account. Basis: schedule of insurance.

6. **Depreciation.**—In this journal entry the departments are charged with their proper proportion of building and equipment depreciation and the Reserve for Depreciation Control account is credited. Basis: schedule of depreciation.

7. **Overhead Absorbed.**—In this journal entry the overhead absorbed is charged to work in process at standard rates. The difference between the overhead absorbed and the actual accumulated overhead represents the overhead which is carried directly to the profit and loss statement. Basis: direct labor by departments at standard overhead rates.

8. **Finished Stock.**—In this journal entry the work in process account is credited with the cost of the goods which have been finished during the month and the Finished Stock account is charged. Basis: summary of orders completed.

9. Cost of Sales.—In this journal entry the goods sold are credited to Finished Stock account and charged to the Cost of Sales Control account. Basis: summary of shipments at cost.

The number and scope of the journal entries will vary considerably in different industries and in different plants. The simple journal entries outlined above merely represent the flow of costs from the beginning to the end of a process.

CLASSIFICATION OF CONTROL ACCOUNTS.—Control accounts are ordinarily divided into **three groups:**

1. Accounts with **permanent balances,** such as raw materials, supplies, finished stock, work in process, machinery and equipment, etc.
2. Accounts with **accumulating balances,** which control the accumulation of actual overhead and expense items.
3. Control **clearing accounts,** which are used for the purpose of accumulating and clearing certain charges which are distributed every month.

ESTABLISHING NECESSARY CONTROL ACCOUNTS.—In establishing control accounts to govern the operation of a cost system, it is important to consider the amount of detail work required in the cost department to accumulate the data necessary for the journal entries so that control may be maintained. For example, the overhead control account may be inclusive, so that transfers can be made between departments without the use of journal entries. In other cases separate control accounts are maintained in the ledger for various departmental overhead. Consequently whenever transfers are made between departments, or when the total cost of service departments is distributed, journal entries must be made for that purpose. In the same manner the work in process department may be inclusive or may be broken down into a series of work in process accounts. In some cases finished stores and finished parts of stores are considered as a part of work in process in order to eliminate the clerical labor involved in the accumulation of journal entries whereby the more detailed accounts may be debited and credited with the monthly transfers.

In all cases a **chart of accounts** should be prepared and published in such a manner that there should be no misunderstanding as to what is to be governed by each control account. This refers particularly to inventory control accounts. Charts are used primarily in order to eliminate errors through charging materials to one account and crediting them to different accounts, because two people may have a different conception as to which account the material belongs. Many materials may be considered as either raw materials or supplies. Consequently, it is necessary for the cost accounting department to specify definitely what materials are to be included in each control account.

In some instances it is found that a good quantity control may be maintained over certain stocks and certain types of departments although the accounting control would be very costly. In such cases it is advisable to use very simple control accounts in the ledger and maintain managerial control on a quantity basis.

Use of Cost Records

RECORDS IMPORTANT TO SHOP ORGANIZATION.—One of the chief duties of the financial department of any organization, particularly of a manufacturing organization, is to make the fullest use possible out of each accounting record. The financial manager should see to it that the shop organization receives copies of operating costs to compare with standards. Departmental foremen should get the monthly overhead statements on which should be listed the original budget figures. The costs obtained from the four basic types of

cost methods previously mentioned should be summarized for shop use so that the factory will benefit from it in future production. Administrative and selling costs should be tabulated as an aid to the managerial and selling ends of the business in keeping within their budget figures. The question of normal overhead rates should be particularly stressed so that the engineering, production, and selling divisions of the business will be continually on the lookout for ways and means of getting in new products on a volume basis which would tend to reduce overhead.

FINANCIAL EXECUTIVE AND THE COST SYSTEM.—The financial executive in formulating his recommendations on financial affairs to the general management must rely on the cost accounting department to furnish him with proper information concerning the **cost of production.** This requires not only a knowledge of basic finance but also a working knowledge of the essentials of cost accounting principles. Where the cost system cannot furnish such data promptly and correctly, the fault may be due to one or more of the following causes:

1. The financial manager's inability to understand and apply cost accounting principles and data as compiled by that department.
2. The cost system does not fit the business.
3. Incompetent cost accounting personnel. The financial executive should be able to detect wherein the personnel fails to obtain proper cost data and to provide the necessary organization to do the work effectively.
4. The inherent difficulty of ascertaining actual costs at a reasonable expense. If the difficulties and expense are out of proportion to results obtained, the cost system used should be abandoned and a simpler type should be selected.

A poor cost system is far worse than none. With none at all the practical manufacturer has a rough idea of actual costs and frequently does not suffer. With an inaccurate system he relies on it or he does not. In the former case he relies on a lie and it will probably ruin him as costs will be understated. In the second case he is a fool for spending money on a cost system which he does not use. A good cost system is the only one to have and in adopting it a business man should look before he leaps. Heretofore there has been much leaping without looking. The real worth of any system may be measured by its practical use in increasing earnings.

SECTION 27

FEDERAL REGULATION OF BUSINESS

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SECTION 27

FEDERAL REGULATION OF BUSINESS

This section describes governmental regulations affecting business under the following federal laws:

Sherman Anti-Trust Act of 1890 (26 U. S. Statute 209).
Clayton Act of 1914 (38 U. S. Statute 730).
Federal Trade Commission Act of 1914 (38 U. S. Statute 717).
Capper-Volstead Act of 1922 (57 U. S. Statute 388).
Dumping Act of 1916.
Webb Export Act of 1918 (40 U. S. Statute 516).

The federal laws of the United States governing trade and commerce become operative and effective only in **interstate and foreign trade transactions** and do not apply to local, intrastate business. Companies confining their business to the limits of their own states, and to articles which do not enter into transactions from one state to another, are beyond the scope of the federal laws. In modern business such a situation is unusual and for practical purposes it would be correct to say that the federal laws apply to all concerns except the very small ones.

Sherman Anti-Trust Act

UNREASONABLE RESTRAINT OF TRADE.—The Sherman Anti-Trust Act of 1890, officially designated as "An Act to Protect Trade and Commerce against Unlawful Restraints and Monopolies," forbids all **unreasonable restraint of trade** by declaring illegal:

1. Every contract, combination, or conspiracy between two or more parties which directly restrains interstate trade or commerce.
2. Every act of a person which shall monopolize or tend to monopolize the trade of the several states.

The law applies to **individual acts** as well as to **combined acts** of two or more persons. (*Northern Security Co.* v. *U. S.*, 193 U. S. 197.)

"The standard of reason which had theretofore been applied at the common law and in the United States . . . . against combinations in restraint of interstate or foreign trade or commerce, of monopolization or attempts to monopolize any part of such trade or commerce, was intended to be the measure used for the purpose of determining whether, in a given case, a particular act had, or had not, brought about the wrong against which the statute provided." (*Standard Oil Co.* v. *U. S.*, 221 U. S. 1.)

"A combination of stockholders in two competing interstate railway companies to form a stockholding corporation which should acquire, in exchange for its own capital stock, a controlling interest in the capital stock of each of

such railway companies, violates the Anti-Trust Act of July 2, 1890, which declares illegal every combination or conspiracy in restraint of interstate commerce, and forbids attempts to monopolize such commerce or any part of it." (*Northern Securities Co.* v. *U. S.*, 193 U. S. 197.)

Enlargement and modifications of the Sherman Act by subsequent laws are summarized below. The Sherman Act dealt almost entirely with consummated restraints. This law is in full force and effect. Its purpose, however, is enlarged on the one hand by the Clayton Act of 1914 and limited on the other by the Webb Export Act of 1918 and modified by the Capper-Volstead Act of 1922.

ILLEGAL ACTS AND CONTRACTS.—The law declares illegal every contract, combination or conspiracy which **directly restrains trade.** (*Standard Oil Co.* v. *U. S.*, 221 U. S. 1.) What illegal contracts are may be implied from the course of dealings of the parties or the circumstances surrounding the relations bringing about the contract prohibited by the law. (*Eastern States Retail Lumber Dealers Assn.* v. *U. S.*, 234 U. S. 600.)

MEANING OF UNREASONABLE RESTRAINT.—In order to determine what is reasonable or unreasonable restraint of trade it is necessary **to consider all the factors in the transaction,** such as the nature of the restraint, its extent and effect, the methods by which the power was obtained and the intention of the parties. (*U. S.* v. *Reading Co.*, 40 Sup. Ct. Rep. 425.) The **final test** whether or not an act is an unreasonable restraint is determined by the **intent of the parties and the nature of the act** which, if it has within it the power to suppress competition, is viewed as an act in restraint of trade. (*Board of Trade of Chicago* v. *U. S.*, 246 U. S. 231.)

EXTENT OF RESTRAINT.—To be illegal restraint of interstate commerce must be of an extent defined in the following:

As to Volume of Trade.—In order to give the law jurisdiction it is necessary that the restraint be of a **substantial part of interstate commerce.** (*U. S.* v. *Union Pacific R. R.*, 226 U. S. 61.)

As to Area.—Monopoly of trade in a city by means of a **trade association** whereby wholesalers in articles entering into interstate commerce will not deal with retailers who are not members of the association, may be a violation of the Sherman Act. (*Montague* v. *Lowry*, 193 U. S. 38.)

As to Time.—A restraint for an **unreasonable length of time** will be illegal. The period of restraint need not extend over a protracted time or beyond a period necessary to the bringing in of a new supply in order to be considered illegal. (*U. S.* v. *Corn Products Co.*, 234 Fed. 964.)

Control of Large Part of Trade.—Although the control of a large part of the trade is not conclusive, it may indicate a restraint of trade and will place on the parties the burden of proof to show that the control was lawfully acquired. (*U. S.* v. *Eastman Kodak Co.*, 226 Fed. 62.)

EFFECT OF RESTRAINT.—This may be described as follows:

On the Public.—The reasonableness of a restraint is determined largely by the effect of the restraint. The effect must be **on the public in general** rather than on an individual. (*U. S.* v. *D. L. & W. R. R. Co.*, 238 U. S. 516.)

Corners.—"It well may be that running a corner tends for a time to stimulate competition; but this does not prevent it from being a forbidden restraint, for it also operates to thwart the usual operation of the laws of supply and demand, to withdraw the commodity from the normal current of trade, to enhance the price artificially, to hamper users and consumers in satisfying their

needs, and to produce practically the same evils as does the suppression of competition." (*U. S.* v. *Patton*, 226 U. S. 525.)

Liberty of Action.—Any restrictions tending to suppress competition by limiting the **liberty of action of traders** to engage in business or transact their business in their usual or customary manner is an injury to the trader and to the public and hence is an illegal restraint of trade. (*Laoewe* v. *Lawlor*, 208 U. S. 274.)

Other Illegal Acts.—All acts, contracts, combinations or conspiracies which have for their purpose the suppression of competition are illegal. Such purposes may be accomplished through the coercion of competitors, impairment of quality, oppression of labor, artificial depression, or advancement of prices of raw materials, etc. (*Board of Trade of Chicago* v. *U. S.*, 246 U. S. 231.)

NATURE OF THE RESTRAINT.—In determining whether or not a restraint is reasonable it is necessary to consider the nature of the restraint. The law covers only **direct restraint** of interstate commerce and not indirect or incidental restraint. (*U. S.* v. *Patton*, 226 U. S. 525.) The law applies to the restraint of trade and covers **both the buyer and the seller** as well as their market. In other words, any restraint imposed on buying and selling in interstate trade is illegal. (*Hard Rubber Co.* v. *U. S. Rubber Co.*, 229 Fed. 583; *U. S.* v. *Whiting*, 212 Fed. 466.)

METHODS OF TRADE.—The methods of trade may have a bearing on the **reasonableness of the restraint** imposed on trade. (*U. S.* v. *Reading Co.*, 226 U. S. 324.) Where control was obtained by usual and normal methods of doing business the courts are inclined to view the acquiring of such control as lawful. Size and efficiency resulting in obtaining a large share of business in fair and legitimate ways and in open competition are not penalized by the courts. (*U. S.* v. *U. S. Steel Corp.*, 40 Sup. Ct. Rep. 293.)

PENALTY FOR VIOLATION.—Every person violating the statute shall be deemed guilty of a misdemeanor, and on conviction is liable to be punished by a fine not exceeding $5,000 or imprisonment not exceeding one year or both at the discretion of the court. (July 2, 1890, C. 647, Section 1-26, U. S. Statute 209.)

Clayton Act

SCOPE OF ACT.—The Clayton Act of 1914 **enlarges on the Sherman Anti-Trust Law** in that it defines and prohibits specific acts and methods. The Act declares unlawful such acts as may substantially lessen competition or tend to create a monopoly. It supplements the Sherman Law by regulating trade practices not covered by that law. Such practices include price discrimination, exclusive contracts, holding companies and interlocking directorates. The Act prohibits **price discrimination between purchasers in domestic trade** where its effect may tend to create a monopoly or substantially lessen competition in any line of commerce except where the difference in price is due to a difference in grade, quality, quantity, cost of selling, cost of transportation, or is made in good faith to meet competition. Different prices to wholesalers and retailers or other classes of customers are permitted if not made for the purpose of restraining trade. (*Bawn* v. *Goodyear Tire & Rubber Co.*, 256 Fed. 570.)

EXCLUSIVE CONTRACTS.—Section 3 of the Clayton Act declares contracts with purchasers relating to the sale, lease, or use of commodities and the fixing of prices in such a manner that purchasers shall not deal with com-

petitors, where the effect of such arrangements is to lessen competition or create a monopoly to be unlawful. This section of the law was designed to reach those large concerns which have an established demand for their goods or have patented articles which are sold on such terms as to exclude their competitors. (*United Shoe Machinery Co.* v. *U. S.*, 42 Sup. Ct. 363; *Standard Fashion Co.* v. *Magrane-Houston Co.*, 42 Sup. Ct. 360.)

LABOR IS NOT AN ARTICLE OF COMMERCE.—Section 6 declares that labor of a human being is not a commodity or an article of commerce. Under this section of the law the various trade laws and anti-trust laws of the United States do not apply to labor organizations.

INTERCORPORATE STOCKHOLDINGS.—The Act (Section 7) prohibits corporations engaged in interstate trade from acquiring stock in competing corporations where the effect of such acquisition may be to lessen substantially competition between them. The law **does not apply** where stock is obtained for the following reasons:

Investment—where such stock is purchased solely for investment and is not obtained for purpose of lessening competition.

No competition—where the nature of business of the two corporations is such that there is no natural competition between them.

Subsidiaries—where the stock is in subsidiaries which carry on natural parts or branches of the company's business provided that the effect is not to substantially lessen competition.

Export companies—where the corporation owns stock in a company engaged solely in the export trade, unless the purpose is to lessen competition in the United States. (Section 7 Clayton Act as modified by Section 3 of the Webb Export Act.)

INTERLOCKING DIRECTORATES.—Article VIII of the Clayton Act prohibits one person from serving as a director in two or more companies engaged in interstate commerce and trade if any one has a capital, surplus and undivided profits aggregating $1,000,000, and if such corporations have been or are naturally competitors of one another. The purpose of this section was to overcome some of the tendencies toward corporate abuses and the elimination of competition brought about by unity of management. An interpretation of the Anti-Trust Law is necessary to determine the lawfulness of interlocking directorates. Several companies may have intercompany directors regardless of their capital, unless those corporations by reason of the nature of their business and their relations to one another are such that they could eliminate competition by having interlocking directorates.

NATIONAL BANK DIRECTORATES.—Section 8 sets forth the circumstances under which **interlocking directorates** of national banks are forbidden. Some of the conditions, subject to certain exceptions, are:

1. No person shall at the same time be an officer, director or employee of more than one national bank where the aggregate deposits, capital, surplus and undivided profits exceed $5,000,000.

2. No person who is a director of a state bank or trust company having deposits, capital, surplus and undivided profits aggregating $5,000,000 or more will be eligible as a director of a national bank.

3. In cities of over 200,000 a national bank shall not have as an officer, director, or employee any private banker or any director, officer or employee of any other bank or trust company located in the same place.

ENFORCEMENT OF LAW.—Under Section 2 of the Clayton Act the following federal bodies are vested with authority to enforce Sections 2, 3, 7 and 8 of that law:

Federal Trade Commission where applicable to trade and industry.
Interstate Commerce Commission where applicable to common carriers.
Federal Reserve Board where applicable to national banks.

The law **does not apply** to **mutual savings banks.** Moreover, a director in a national bank, although he may be precluded by the law from becoming a director in another national bank, may nevertheless become a director of one other bank, state or national, where the entire capital stock of one of the banks is owned by the stockholders of the other. Also, a **director of Class A of a Federal Reserve Bank** may be an officer, director, or both, in one member bank.

The Federal Trade Commission

PURPOSE AND MEMBERSHIP.—The Federal Trade Commission was created by Congress in 1914 for the purpose of co-ordinating in a measure governmental relations with business. Broadly speaking, the object of the Commission is to accumulate experience, maintain continuity and consistency of governmental policy toward business, and to aid in bringing about constructive legislation regulating interstate trade and commerce. Its **primary function** is to initiate at its own discretion investigations and to furnish information to Congress regarding additional legislation for regulating interstate and foreign trade.

The Commission consists of **five commissioners** appointed by the President with the advice and consent of the Senate. Appointments are for terms of 7 years with a salary of $10,000 a year. The commissioners are not allowed to engage in any other business, vocation or employment, and not more than three of them may belong to the same political party. The commissioners may be removed from office by the President for cause which may consist of inefficiency, neglect of duty, or malfeasance in office.

SCOPE OF POWERS.—The Commission's powers are:

1. Investigative
2. Advisory, and
3. Regulative

These powers are derived primarily from the Federal Trade Commission Law and the Clayton Act and are confined to interstate and foreign trade.

POWERS TO INVESTIGATE.—The investigative powers of the Commission may be summarized as follows: To investigate anywhere within the United States the conduct, practice, organization, management or business of any corporation engaged in interstate trade and its relation to any other business conducted by a corporation, partnership, sole owner or association. The **only exceptions** are banks, railroads and other common carriers.

Although the Commission has broad powers to investigate there are **certain limitations,** among which are:

1. The **law itself,** whereby the Commission is limited to the purpose for which it was created.
2. The **Federal Constitution,** which provides in the Fourth Amendment that persons should not be subjected to unreasonable searches and seizures, and in the Fifth Amendment, that no person shall be compelled to incriminate himself.

3. The **purposes of the Commission,** the functions of which confine it to businesses engaged in interstate trade.
4. **Other functions,** which limit the investigative power to the scope of its correlative advisory and regulative powers.
5. As the Commission itself is subject to the law, any person called upon to give information may refuse to do so if he can show that the information sought does not relate to the subject under investigation or which the Commission has a right to investigate under the Clayton Act or Federal Trade Commission Act.

The Commission has shown a tendency to increase the scope of its authority eyond reasonable limits, and in many important cases the United States ourts have refused to uphold the Commission, among which are the following: ederal Trade Com. v. *American Tobacco Co.* and *P. Lorillard Co.*, 264 U. S. 98 (1924); *Federal Trade Com.* v. *National Biscuit Co.*, 266 U. S. 613 (1925); ederal Trade Com. v. *Hammond Snyder & Co., Baltimore Grain Co.*, and *I. C. Jones Co.*, U. S. Supreme Court, March 15, 1925.

METHODS OF INVESTIGATIONS.—The Commission may conduct its vestigations by:

1. Obtaining information from other departments and bureaus of the government.
2. Requiring reports from corporations.
3. Examining and copying documentary evidence of corporations.
4. Summoning, under subpoena if necessary, and examining witnesses and documents.
5. Enforcing its investigative authority by requesting proper governmental authorities to bring actions which may consist of one of the following:
   (a) Contempt proceedings
   (b) Actions for penalties
   (c) Criminal prosecutions
   (d) Proceedings in mandamus

REPORTS FROM CORPORATIONS.—The Commission may ask corpotions for reports on particular matters, if they relate to trade, with a view determining whether there are alleged violations of the anti-trust laws. ich reports must be restricted not only to obtaining facts relating to matters fore the board but must also be confined to corporate organization, business actice and management, and its relations to other corporations, persons or rtnerships. Under Section 6 (b) of Federal Trade Commission Act, the filing reports is required of corporations but does not apply to individuals, banks d common carriers. The Commission may classify corporations and require ports from certain classes and not of others; also it may require **annual ports and special reports.** The form of reports, whether under oath or otherse, when to be filed, questions to be propounded to the corporations, and ch rules as it may see fit to carry out the provisions of the Federal Trade ommission Act and the Clayton Act, are under the control of the Commission.

TYPE OF REPORT REQUIRED FROM CORPORATIONS.—The follow- g is the type of report the Commission requires of corporations:

REPORT ON INDUSTRIES

This report is requested for the purpose of compiling data for the industry in which ur company is engaged, and a summary of the industry will be sent to you as soon as

prepared by the Commission. No information will be disclosed or published regarding the business of any particular concern.

Information furnished is for the year ending....., 19—

(Answers should cover calendar year 1915 or your fiscal year corresponding most nearly thereto.)

1. Name of concern.....
   Main office.....
   (Street) (City and State)
2. Kind of business in which engaged.....
   If manufacturing or producing, state principal product or class of products manufactured or produced.....
   If mercantile, state principal commodity or class of commodities dealt in and whether retail or wholesale.....
3. Capital stock outstanding at close of year:
   Common stock..... $.....
   Preferred stock..... .....
4. Bonds and similar obligations outstanding at close of year..... .....
5. Accumulated surplus (including undivided profit), or accumulated deficit at close of year (if deficit, so indicate)..... .....
6. Net sales for year (gross sales less trade discounts and outgoing freight on sales)..... .....
7. Net profit (or loss) from operations during the year after deducting all expenses except interest on bonds and on similar obligations .....
8. Net income from other sources during the year..... .....
9. Depreciation on plant and equipment charged off during the year .....
   Average rate, 1915.....%; 1914,.....%; 1913,.....%.
10. Bad debts charged off or provided for during the year..... .....
    Percentage of bad debts, or provision therefor, of credit sales, 1915,.....; 1914,.....; 1913,.....
11. Have items 9 and 10 been deducted in arriving at item 7? .....

Signature,.....
(Title of official signing).....
Date....., 19—

EXAMINING DOCUMENTS AND WITNESSES.—Under the law the Commission may examine any **documentary evidence of any corporation under investigation.** The law defines documentary evidence as meaning all documents, papers and correspondence in existence at or after the passage of the law. (Section 4.) The powers of the Commission **to examine witnesses** may be summarized as follows:

1. Corporations and individuals are subject to examination.
2. There must be a matter under investigation, or proceeding pending over which the Commission has legal jurisdiction.
3. The Commission is bound by the essential rules of legal evidence so as not to prejudice the rights of individuals and corporations against whom proceedings are taken.
4. The Commission has greater freedom of action in pursuing its advisory function to obtain information to enable it to make reports and recommendations for legislative purposes than it has in pursuing its legal regulative functions.
5. Subpoena may be issued by any member of the Commission to require attendance of witnesses from any part of the United States.
6. Testimony may be taken by deposition in any proceeding before the Commission.

INVESTIGATION OF INDIVIDUALS.—The powers of the Commission in so far as they relate to investigations of private persons, are confined to the

nstitutional limitations and to such matters as are made the subject of a com- int or a judicial investigation before the Commission under the Federal Trade ommission Act against unfair methods and under the various sections of the layton Act. A natural person need not furnish any information in any kind f a proceeding if such information will tend to incriminate him. Corporations ave not this protection, nor have private persons in matters relating to in- rmation which would incriminate a corporation (Section 9). The funda- ientals of legal procedure apply in the exercise of the Commission's powers. ny natural person who may testify or produce evidence before the Com- ission on any account, transaction, or matter, shall not be prosecuted or ubject to any penalty on the subject matter testified to. In order to obtain mmunity under this section the Federal Trade Commission Act specifically ets forth as a prerequisite that such testimony or evidence so furnished shall e pursuant to the issuance of a subpoena (Section 9).

MEANS OF ENFORCING POWERS.—To secure the enforcement of its owers to investigate, the Federal Trade Commission has the same powers as he Interstate Commerce Commission, which may be summarized as follows:

1. Criminal proceedings
2. Action for penalties
3. Contempt proceedings
4. Mandamus

OFFENSES AGAINST THE UNITED STATES.—Acts done with the intent o obstruct or resist the Federal Trade Commission are offenses against the Jnited States. These are summarized as follows:

1. Refusing to furnish the Commission, for the purpose of inspection and making copies, any documentary evidence of any corporation subject to the jurisdiction of the Commission.
2. Refusal or willful neglect to produce documentary evidence; refusal to attend, testify or answer any lawful inquiry or requirement of the Commission in obedience to a subpoena.
3. Altering, mutilating, destroying or removing from the United States any documentary evidence of any corporation subject to the Federal Trade Commission Act.
4. Making a false report on any statement required by the Commission.
5. Making false entries on the records and accounts of a corporation subject to the Federal Trade Commission Act.
6. Willful neglect or causing not to be made complete, accurate and full records of all facts and transactions pertaining to the business of a corporation subject to the Federal Trade Commission Act.

PENALTIES.—Persons convicted by a federal court of competent jurisdiction or one of the foregoing offenses against the United States may be fined not less han $1,000, nor more than $5,000, or imprisonment or both. For refusal to ppear, testify or produce documents, the maximum imprisonment is 1 year, nd for the other offenses, 3 years (Section 10).

ADVISORY POWERS.—The advisory powers of the Commission may be ummarized as follows:

To Congress.—To furnish information and advise on any domestic or foreign rade conditions which may affect trade or commerce of the United States. o report alleged violations of the anti-trust laws by corporations (Section 6).

To the Courts.—On request of the courts to ascertain and advise on the ppropriate form of decree in suits in equity brought by the Attorney General

under the anti-trust laws in order to enforce the laws with the least inconvenience to business (Section 6). The dissolution of a combination or consolidation violating the anti-trust laws is a complex problem and the formulating of a proper decree to bring this about taxes the ingenuity of the courts. In the past criticism was made that the decrees have not entirely accomplished their purpose. (See *Standard Oil Co.* v. *U. S.*, 221 U. S. 1; *American Tobacco Co.* v. *U. S.*, 191 Fed. 371.)

To U. S. Attorney General.—Make recommendations to bring about a readjustment of the business of corporations violating the anti-trust laws so that thereafter the corporations may conduct their affairs in accordance with the law (Section 6). Report on the manner in which corporations are carrying out the final decrees against such corporations for violating the anti-trust laws.

To the Public.—Furnish information, reports and advice regarding many trade matters, except trade secrets and names of parties reporting to them. The Commission is authorized to publish from time to time such information regarding trade which it considers of public interest (Section 6).

REGULATIVE POWERS.—The Commission has regulative power to take statutory proceedings to obtain a decree of a court of competent jurisdiction to accomplish its purpose under the Federal Trade Commission Act and the Clayton Act, the principal sources of the Commission's powers. Under the Clayton Act the following are declared unlawful:

Price discrimination between purchasers where such discrimination tends to substantially and unreasonably decrease competition or to create monopoly in any line of trade (Section 2).

Exclusive purchase and sales arrangements, where such arrangements may substantially decrease competition or tend to create monopoly and which are obtained by fixed prices for resale on such terms that the purchaser or seller shall not deal with competitors.

Intercompany stockholdings and holding companies where by reason of such holdings the competition of the companies will be substantially decreased in a community so as to tend toward a monopoly.

INTERLOCKING DIRECTORATES.—A director of a **national bank, state bank or trust company** with capital, surplus and undivided profits of over $5,000,000, cannot, with certain exceptions, be a director of another national bank. A person cannot be a director at the same time in two or more companies engaged in interstate trade and commerce any one of which companies has capital, surplus and undivided profits of more than $1,000,000 where such companies are competitors and the elimination of such competition would result in a violation of the anti-trust laws. **Unfair methods** in trade and commerce are declared unlawful under the Federal Trade Commission Act and under the Clayton Act. The Commission has **no power to punish violations** of the law. Its authority is essentially preventive in so far as its orders may be sanctioned and enforced by the courts.

PROCEDURE OF THE COMMISSION.—The Commission is a **complaining witness** and begins proceedings by issuing and serving a complaint and notice setting forth the charges of the Commission and setting a time and place where the hearing is to be held. This notice must be served on the proper person who, in a corporation, may be the president, secretary, or other officer. Notice must be given at least 30 days before the time the hearing is to be held.

Heretofore the complaints of the Commission were published before the issues were tried, which in many cases did great harm to business. In May

1925, the Commission was reorganized and the new majority made an effort to end the many injustices done to honest business by publishing tentative reports and complaints before all the facts were known and the issues tried. The Commission decided to withhold publication of complaints. In short, it would follow the rule of the common law that regards a defendant as honest and guiltless until the contrary is proved. The members of the Commission are not in agreement as to the legality of this rule and have sought advice of the Attorney General on this subject together with other phases of the Commission's powers.

The Commission has **no compulsory process** to enforce attendance at its hearings by warrant, attachment, etc. An accused person may or may not attend. Refusal to attend, however, would be prejudicial if a defendant would want to make a defense before the Commission at a future time. His refusal to attend the hearings automatically precludes him from attending the future hearings and present his defense. The Commission itself has no authority or process to enforce its own orders. For this purpose the **aid of the U. S. Circuit Court of Appeals** is required. The courts, however, are not bound by the recommendations of the Commission, and when they do act they have **original and not appellate jurisdiction.**

TRADE PRACTICE SUBMITTAL.—The trade practice submittal is a procedure which was instituted by the Federal Trade Commission as a means for assisting the proceedings provided by statute for the elimination of unfair methods of competition. It had its origin in an effort to eliminate, simultaneously and by consent of those engaged in a given industry, practices which, in the opinion of the trade, are unfair. This procedure has been employed by the Commission on its own initiative when a large number of complaints come to the Commission from a single industry, and has been employed at the request of the industries involved. The practices agreed upon by the industry as unfair are thereafter held by the Commission to be prima facie unfair when considering complaints against concerns in the industry if the particular practices are within the jurisdiction of the Commission.

A **typical trade practice submittal** of the subscription book publishers is given below.

TRADE PRACTICE SUBMITTAL OF SUBSCRIPTION BOOK PUBLISHERS

At the request of the Subscription Book Publishers Association a trade practice submittal was held with the book publishers selling books by subscription, in Washington, D. C., on May 20th and May 21st, 1924. Commissioner John F. Nugent presided at the conference.

It was found that many of the publishers who sell books by subscription are not members of the Association. The Association has twenty-eight members, although the number of concerns engaged in this line of business outside of the Association is probably twice that number. An attempt was therefore made to ascertain the views of those outside the Association with respect to the question as to whether a trade practice submittal was desired. Those publishers were notified of the practices which the Association desired to discuss at the meeting and were also advised that the discussion would not be limited to those practices and that other practices which publishers, not members of the Association, might desire to present would be considered. Many replies were received expressing an interest in such a meeting, so that the date was set. Invitations were sent to all members of the industry whose names were furnished to the Commission. . . .

Thirty-one concerns were represented at the meeting and it was there stated that they do more than the majority of the volume of said business of the country. Many other concerns expressed an interest in the meeting but were unable to be represented.

After a preliminary discussion of various practices, the representatives of the concerns mentioned were requested to and did organize for the purpose of adopting resolutions by

which the opinion of the trade might be registered and the following resolutions, which have been certified by the Chairman and Secretary of the meeting, were adopted.

1. Resolved, That we disapprove any editorial policy whereby the listing of any name as editor or contributing editor tends to practice deception on the public.

2. Resolved, That as to all books, the use of only the last date of copyright, and eliminating all previous copyright dates, is condemned.

3. Resolved, That books bound in substitutes for leather should not be represented as being bound in levant or in any way which tends to carry the inference that leather bindings are used.

4. Resolved, That the same or essentially the same set of books should not be sold simultaneously under different titles; that books should never be sold under a title that will mislead as to contents, or under a title which tends to confusion with some previously published work.

5. Resolved, That the marking-up of the price of books and the use of the so-called "raised" contract be condemned; that representing that the price asked is below the usual price, or that the price will soon be increased, when such is not the fact, be also condemned.

6. Resolved, That when so-called extension, revision or continuation service is offered, the contract made with the purchaser shall state precisely what the service is, that such service is sold at a price distinct and apart from the books which it is designed to keep up to date, that the books shall be sold at a stipulated price, and the service shall be sold at a stipulated price; that in case such service is sold to continue over a period of years the service shall actually be furnished as promised to such subscriber without the use of coupons or other form of request.

7. Resolved, That the practice of representing that a certain number of books have been set aside for advertising purposes, to be given free, when such is not the fact, is condemned; and that the practice of representing that a certain number of selected persons in each community have been designated to secure a book or a set of books, or any form of service, free, when such is not the fact, is clearly misrepresentation, and is condemned.

8. Resolved, That the offering of membership in societies, clubs and other organizations, which in fact do not exist, in connection with the sale of books be condemned; that a service devoted to the answering of inquiries, if offered, be represented only as such and not as something offered by some organization, separate and apart from the concern selling the books when such organization does not exist, in fact, and actually renders no such service, and the names of well-known authors, editors or authorities should not be used in connection with such offers unless they, in fact, actually are to answer or supervise the answering of the inquiries.

9. Resolved, That the practice of securing agents by misleading or dishonest promises or guarantees, and enticing away the agents of competitors by such means be condemned, but nothing in this resolution shall be construed in any way limiting the free choice of agents to select their own employers.

10 Resolved, That the practice of giving with services or sets, premiums of books, service or other objects of value, shall not be abused by sales representations of which the effect is to deceive the purchasers as to the relative values of the set or service as compared with the premium accompanying it.

11. Resolved, That no publisher shall be a party to or assist in the organization of so-called independent agents or dealers to sell his books by methods here condemned, and which he as a publisher professes himself not to use; nor shall a publisher sell his books to so-called independent agents or dealers or agents when he knows they are to use unfair or dishonest means to distribute the books to the public. No publisher shall be a party to doing indirectly what he professes not to do directly.

12. Resolved, That it shall be an unfair practice to take a name which so closely resembles the name of an already existing firm as to tend to cause confusion and mislead the public.

13. Resolved, That all testimonials should be genuine and apply to the book or books actually offered; that generally the complete testimonial should be given; and that in cases where only a part is used, such part should fairly state the name of the writer, and in no case shall words, phrases or sentences be taken from a testimonial and be used for selling purposes which when taken from their context have a different meaning from that intended by the writer; that public bodies, libraries, or associations should not be advertised or

represented as commending a set of books unless advised as to the use of such commendation, and unless the fact is that the public body, library or association as such and not merely some individual has commended the work and that no testimonial from any source whatsoever which has been obtained by purchase, gift or honorarium be used; securing testimonials by such means, whether by more or less open or by subtle methods is condemned.

14. Resolved, That these resolutions, in so far as practicable, become effective at once; except, that where any changes in an existing edition of a book, or set of books may be required, these resolutions apply to all future editions or printings.

With the exception of resolution No. 10, the resolutions as stated above were adopted by the members of the industry present, unanimously. Attention is also directed to the fact that it is the intention of the industry to put these resolutions into effect immediately.

The above resolutions were reported to the Commission and after consideration were received and approved. (Official statement released for publication July 31, 1924.)

Trade Methods Declared Unfair and Unlawful

TWO GENERAL TYPES.—The Federal Trade Commission Act declares unlawful the use of **unfair methods of competition** in interstate and foreign trade and commerce. Although the Act does not attempt to define what unfair competition and methods are, it empowers the Federal Trade Commission to determine what unfair methods are, **subject to review by the courts** as to the fairness or unfairness of their findings in specific instances. Under the various findings and decisions of the Commission and of the courts, unfair methods resolve themselves into **two types:**

Those which **offend good morals** because of the nature of the act, such as fraud, deception, bad faith, etc.

Those acts which, although not wrong in themselves, have a tendency to **limit competition,** tend toward monopoly, or are **against public policy.**

The following is a classification of some of the unfair methods **passed on by the courts:**

1. Injury to the public
2. Local price cutting
3. Paying rebates
4. Espionage
5. Full line forcing
6. Boycotts and blacklists
7. Fighting brands
8. Unfair methods in competition

Injury to the Public.—Practices in trade which result in an injury to the public as distinguished from private injury are declared unlawful if they tend to destroy individual opportunity or artificially increase prices. Judge Sanborn in *U. S.* v. *International Harvester Co.*, 214 Fed. 987, says in part:

"It is equally well established that the reason for the prohibition by . . . ., the statute under consideration the unreasonable restraints of and attempts to monopolize trade was and is that, by unduly restricting competition they (acts) are injurious to the public in that (1) they raise the prices to the consumer of the articles they affect, (2) limit their production, (3) deteriorate their quality and (4) decrease the wages of the labor and the prices of material to produce them" . . . .

"Undue injury in the ways just stated to the public (that is to say, to the consumers and makers of the articles produced or sold) is the basis and reason for the prohibition and the test of undue or unreasonable restraint or attempt to monopolize."

Generally speaking, practices which tend to injure or prejudice the public in a material way through fraud, deception or dishonest methods, are unlawful. (*Fed. Trade Com.* v. *Winstead Hosiery Co.*, 42 Sup. Ct. 384.)

Local Price Cutting.—This practice consists of cutting prices **by a monopolistic firm** in a certain section where there is competition to a point below the cost of production, if necessary, with the view of destroying competitors, and by raising prices in those sections where there is no competition. After the local competitors are driven out of business, prices are raised to a profitable basis. (*U. S.* v. *Great Lake Towing Co.*, 208 Fed. 733.)

Paying Rebates.—Article III of the Clayton Act declares unlawful the giving of **rebates on the price of goods** which are sold on such restrictions and conditions that the purchaser shall not buy goods from competitors of the seller. Various arrangements are made to bring about this condition, but the one generally followed is the making of an agreement with the purchaser for the exclusive sale of the goods of the seller, and after a certain period, giving a refund based on his purchases, provided that the purchaser during the subsequent period still continue as a purchaser under such an agreement. The effect is to confine the dealer to the products of the seller and restrict competition for a continuous period. (*U. S.* v. *Eastman Kodak Co.*, 226 Fed. 62.)

Espionage.—The obtaining, in a legitimate manner, of information regarding the business and methods of competitors is unquestioned. Where, however, questionable methods are employed, such as the use of detectives, spies, bribing of employees, etc., it becomes an unfair method declared illegal under the trade laws. Such methods have been employed for various purposes, among which are local price cutting and observing their effect on local competitors, finding out if exclusive sales arrangements are observed, etc. (*U. S.* v. *Eastman Kodak Co.*, 226 Fed. 62; *Fed. Trade Com.* v. *Am. Agr. Chem. Co.*, 1 F. T. C. 226.)

Full Line Forcing.—Forcing a dealer to handle the full line of goods of a **company with monopolistic tendencies** is unlawful. To accomplish this purpose various methods are employed. Generally, some desirable or patented article in great demand is used as a means to this end. The seller refuses to sell such articles unless the buyer purchases the entire line, which may contain some articles which are undesirable and can be obtained from competitors on better terms. (*U. S.* v. *United Shoe Machinery Co.*, 227 Fed. 507.)

Boycotts and Blacklists.—The use of boycotts and blacklists in conjunction with other methods resulting in restraining trade or eliminating competition is illegal. When used in conjunction with exclusive purchase and sales agreements, they render it impossible for a person who violated the agreement as to price fixing, purchase, sale or other terms of the agreement to obtain any further merchandise from the firm seeking the monopoly. On the other hand, boycotts and blacklists were used by associations of retailers **against manufacturers** who sold direct to consumers. Such acts were held illegal, being in violation of the Sherman Anti-Trust Act. The companies were permanently enjoined from issuing such blacklists and conducting boycotts. (*U. S.* v. *Eastern States Retail Lumber Dealers Assn.*, 234 U. S. 600; *Fed. Trade Com.* v. *Western Sugar Ref.*, 2 F. T. C. 151; *Straus* v. *Am. Publishers Assn.*, 231 U. S. 222.)

Fighting Brands.—The adoption of fighting brands to drive competitors out of business is considered unfair trade. The method followed, with certain variations, is for a concern which desires to destroy competition to adopt a particular brand, ostensibly made by an independent dealer and sold to the customers of the competitors through different channels, salesmen, etc., at low prices, generally below the cost of production. When the customers have

en won away from the competitors and the monopolistic company feels at it is well intrenched, the fighting brand is discontinued.

Unfair Methods of Competition.—What unfair methods are in trade and ompetition is not defined specifically by the laws and it is necessary to go to e many court decisions for definitions. Generally speaking, the term as ed by the United States Supreme Court means trade practices which tend suppress competition, restrain trade unduly, or create a monopoly. Chief stice White in *Standard Oil Co.* v. *U. S.*, 221 U. S. 42, said:

"Without attempting to follow the elaborate averments on these subjects, read over fifty-seven pages of the printed record, it suffices to say that such verments may properly be grouped under the following heads: Rebates, references and other discriminatory practices in favor of the combination by ilroad companies; restraint and monopolization by control of pipe lines, nd unfair practices against competing lines; contracts with competitors in straint of trade; unfair methods of competition, such as local price cutting the points where necessary to suppress competition; espionage of the siness of competitors; the operation of bogus independent companies and ayment of rebates on oil with the like intent."

Several Typical Unfair Methods of Trade

Some of the business methods declared unfair or illegal by the Federal Trade ommission and the federal courts are set forth below.

COMMERCIAL BRIBERY.—The following are some of the forms of commercial bribery:

Bribing Customers' Employees.—Where corporations or individuals give nd offer to give employees of their customers or prospective customers, without the knowledge and consent of their employers, sums of money as an inducement for them to influence their employers to purchase from them, the donors, nd to refrain from dealing with competitors, this constitutes unfair methods competition and is illegal. (*F. T. C.* v. *Seymour Chem. Co. et al.*, 4 F. T. C. 69.)

Payment of, and offers to pay, employees of customers without their knowledge or consent, a **commission or bonus** of a given per cent of the bill for epairs done for the customer, thereby tending to induce employees to prefer he giver unduly over competitors, and to induce competitors to maintain milar practices, thereby tending to increase the cost of repairs unduly and nfairly, were held as constituting unfair methods of competition. (*F. T. C. Wm. Robinson*, 4 F. T. C. 97.)

Lavish Entertainments.—Lavish entertaining by means of automobile arties, theatre parties, etc., together with paying of **secret commissions** mounting to 5% of the invoice, all aggregating thousands of dollars annually, onstitute unfair competition, the effect of which were to increase the price of he product to customers, taking unfair advantage of owners or employers ho received no consideration in return for such expenditures. (*F. T. C.* v. *G. McFarlane*, 4 F. T. C. 292.)

RESTRICTION OF COMPETITION.—Competition is restricted by the llowing practices:

Division of Territory.—An agreement whereby each member to the agreement is given exclusive use of a certain territory, thereby giving a monopoly that territory, is illegal. (*U. S.* v. *Cowell*, 243 Fed. 730; *F. T. C.* v. *Texas* ., 273 Fed. 478.)

Classification of Trade.—Although an individual may select a party with whom he will deal, the united action by members of a trade association to accomplish this is unlawful. (*U. S.* v. *Colgate & Co.*, 250 U. S. 300.)

Allotment of Customers.—The practice sometimes adopted by sellers by which a particular customer is assigned to one seller, his competitors agreeing not to do business with such customer or to quote him only prices higher than to others, is unlawful. (*U. S. Tobacco Co.* v. *American Tobacco Co.*, 163 Fed. 701.)

Curtailment of Production or Supply.—Agreements suppressing competition of production, with an increase of price as an inevitable result, is illegal. This may be done by—

1. Common selling agency.
2. Agreement between employers and workers.
3. Fomenting and financing strikes.

Restricted Distribution.—Attempts to control channels of distribution are considered unfair. (*California Wholesale Grocery Co.* v. *F. T. C.*, 275 Fed. 725.)

Operating a Secret Subsidiary Company.—Where a corporation purchased the capital stock of a competing company, caused its own employees, or officers of the competitor to convey to it the business, and proceeded to serve substantially all the trade theretofore served by the competitor, with the result that existing competition between the two concerns and prospective competition was suppressed and destroyed, and that commerce in the territory covered by the competitor was restrained and with a tendency to create a monopoly in said corporation, it was held that such acquisition of stock, conveyance of business and property and subsequent dealings, were a violation of Section 7 of Clayton Act. (*F. T. C.* v. *Armour & Co.*, 4 F. T. C. 457.)

Limitation of Use and Resale of Patented Articles.—Obtaining a patent results in restraining others from manufacturing, selling or using the article patented without the consent of the holder of the patent right. The legal monopoly covers only the patented article, and when sold, the patent holder cannot impose restrictions regarding its use, prices at which it is to be resold, or the use of certain specified materials on the patented article. (*Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490; *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U. S. 502.)

MISREPRESENTATIONS.—The following misrepresentations have been declared to constitute unfair methods of trade:

Simulation of Corporate and Trade Names.—Such practice with intent to mislead and confuse the trade and the public constitute unfair methods of competition. (*F. T. C.* v. *United Allegretti Co.*, 4 F. T. C. 120.)

Simulation of Trade Marks, etc.—This together with the wrongful appropriation of competitor's matter, mislabeling and false and misleading advertising, constitutes unfair methods of competition. (*F. T. C.* v. *M. G. Slocum et al*, 4 F. T. C. 155.)

Mislabeling and Misrepresentation of Prices.—Labeling of containers bearing the legend "Price $1.50" or "Price $3.00," the price shown being fictitious and exaggerated with the effect of misleading purchasers and the general public into believing that the said prices are its usual retail prices, and of enabling, encouraging and aiding dealers to defraud the public by obtaining excessive prices, or by selling at less than the figure indicated, to mislead and deceive purchasers into believing that the high grade of goods was being sold

a reduced price has been held to be unfair. (*F. T. C.* v. *Marx Finstone*, F. T. C. 163.)

Misbranding of Inferior Goods.—Such misbranding by well known standards, branding inferior steel as "Sheffield," with a tendency thereby to mislead e retailer into believing that the same was made in Sheffield and to encourage isrepresentation to that effect, and with the effect of similarly misleading a ibstantial part of the purchasing public and of competing unfairly both with akers of or dealers in the genuine Sheffield cutlery and with domestic cutlery ot so branded, to the injury of both and to the injury of free competition, in e sale of cutlery, has been held to constitute unfair methods of doing business.

Misbranding of Substitutes.—Advertising as "White Ivory" articles com-osed of nitrated cellulose and resembling ivory in color, with a tendency to islead and deceive the purchasing public as to the value and to induce the rchaser in mistaken belief that they were made of ivory—such false and isleading advertising has been held to be an unfair method of competition *T. C.* v. *A. Lisner et al.*, 4 F. T. C. 305.)

Misbranding of Imitations.—Pens marked "14 K. Gold Plated," the arrange-ent being such that the barrel of the pen obscured "plated," leaving visible e words "14 K. Gold," with the effect of misleading the purchasing public to believing that the pen points were 14 karat gold, and of encourag-g and aiding thereby the misleading and deceiving of the public, have been eld to be unfair methods.

Misbranding of Adulterated Products.—Sale of adulterated product as re is unlawful. (*F. T. C.* v. *Polomo Specialty Co.*, 2 F. T. C. 195.)

Selling Repaired and Rebuilt Articles as New.—This has been held as unfair ethods of competition. (*F. T. C.* v. *The Check Writer Mfr. Inc. et al.*, 4 T. C. 87.)

SUMMARY OF UNFAIR TRADE PRACTICES.—The Federal Trade ommission has declared as unfair and illegal many trade practices which ve been classified according to the mediums of development of those practices the purposes sought to be accomplished thereby. The following is a mmary:

dvertising:

Agency's information obtained under false pretenses.
Discrimination in sale of space.
Free advertising conditioned on non-sale of competitor's product.
Inducing refusal of competitor's advertisements.
Publishing journal for advertising purposes and including advertisements of reputable firms without permission.
Rebates to customers for advertising manufacturer's product.
Simulation of competitor's advertising.
Simulations of news items.

oycotting:

Various phases of boycotting by individuals, associations, purchasers and sellers.

each of Contract, Inducing of:

Arrangements having for their purpose the breaking of contracts by employees are considered unfair. (*F. T. C.* v. *Stanley Booking Corporation*, 1 F. T. C. 212.)

ibery (Commercial):

Of associations and conventions.

Of customers' and prospective customers' employees to further the sale of various products.
Of customers' salesmen.
Of public officials.

Competitors, Practices Directly Against:
Accepting shipments intended for competitors.
Affiliation with competitors falsely claimed.
Catalogues, destruction of.
Containers of competitors illegitimately used.
Competitors' customers interfered with.
Competitors' employees bribed.
Competitors' employees induced to leave employ.
Espionage of competitors.
Estimates—bogus or spurious requests for.
Intimidation of competitors.
Lessors induced to terminate leases of competitors.
Misrepresentation or disparagement of competitors' products, methods, financial standing, etc.
Prices of competitors misquoted.
Products of competitors interfered with.
Purchases made to embarrass competitors.
Restricting source of supply of competitors.
Sale of competitors' deteriorated product.
Substituting own goods for competitors.
Successor of competitor—claiming to be.
Trade secrets of competitors acquired.

Contributions: See Bribery.

Entertainment: See Bribery.

Espionage: See Competitors.

False Representation: See Misrepresentation.

Importer: Falsely claiming to be.

Labels: See Trade Marks.

Mail Order Houses:
Practices aimed to injure mail order houses.
Practices in behalf of mail order houses considered unfair.

Manufacturer: Falsely Claiming to Be.

Misrepresentation of Goods Offered for Sale:
City, state or county of origin or manufacture.
Condition—old offered as new.
Condition—repaired offered as new.
Condition—reconstructed offered as new.
Endorsement of Product Falsely Claimed:
By government or department thereof.
By individuals or associations.
Quality Content or Effectiveness:
By misleading trade names or brands.
Service in conjunction with goods.
Union Made, When Not.
Value—Fictitious and excessive price markings.
Of municipal bonds.
Of shares of stock and properties of corporation promoted.

Weight—misrepresentation as to.

isrepresentation of Plant Facilities and Equipment.

onopolies:
Combinations of competitors, including acquisition of control of competitors.
Competing with customers as means of coercion.
Concealing control of supposed independent.
Purchasing agency formed to monopolize buying.
Restrictions on articles sold, leased, licensed or loaned. (See Selling Methods.)

ames:
Fictitious trade names used.
Government, association or individual endorsement falsely indicated.
Manufacture or wholesale of product falsely indicated by name. (See also "Manufacturer," "Importer.")
Simulation of competitors:
Corporate or business name.
Trade name.

tents:
Consent decrees obtained for fraudulent purposes.
Exclusive rights falsely claimed.
"Patented" falsely imprinted on product.
Threatening suit for, or falsely claiming infringement.

ice:
Fixing to establish uniform resale price.
Discrimination in price based on—
Advertising.
Conditions of sale.
Credit—falsely claiming no extra charge for credit.
Location or territory.
Quantity purchases.
Restricted use or restricted sale of competitors' products.

oduct, Simulation of Competitors'.

rchasing Methods:
Coercing manufacturers to guarantee against decline in price.
Competitors' products bought up.
Conditioning purchase on manufacturers' refusal to sell to others.
Excessive prices paid to embarrass competitors.
Monopoly created for purchase of supplies.
Uniform prices for used automobiles.

ling Methods:
Average prices misquoted for comparison with own.
Bidding prearranged.
Combination sales (sale of certain goods below cost conditioned on purchase of other goods).
Competing with customers to coerce them to purchase from respondent.
Contracts falsely represented.
"Free" distribution of product.
Guaranteeing resale.
Legal advice furnished competitors' customers for contract evasion.
License fee paid if competitors' goods are not dealt in.

Lotteries.
"Money back" guarantee not observed.
Orders exaggerated to deceive jobbers.
Rebates of payments to competitor.
Refusal to sell to dealers handling competitors' products.
Refusal to sell to mail order houses.
Refusal to sell except in conjunction with other closely associated article.
Restrictions on articles, sold, leased, licensed, or loaned, i.e., "tying clauses."
Sales below cost to embarrass competitors.
Shipping goods without orders.
Special sales and reduced prices falsely advertised.
Territory divided with competitors.

Store Fronts, Signs, Windows, etc., Simulation of Competitors.

Trade Marks and Labels, Simulation of Competitors.

Capper-Volstead Act of 1922

This Act modifies the Sherman Act in that it **legalizes associations of producers of agricultural products** dealing in such commodities. The conditions necessary to make such an organization legal are: (1) that they shall be operated for mutual benefit; (2) that they either allow each member only one vote or do not pay dividends in excess of 8% annually; and (3) that they do not deal in agricultural produce of non-members to an amount greater than the total of their own members.

Dumping Act of 1916

Dumping Act of 1916 forbids the systematic dumping of foreign goods in the United States **at prices below the actual or wholesale market price** of the country of origin at the time of their exportation. Such dumping is construed as unfair trade and competition if it is done with intent to injure, destroy, or tends to prevent the establishing of such an industry in the United States; or if it results in monopoly or restraint of trade in those goods in the United States.

Webb Export Act

The Webb Export Act **limits the Sherman Anti-Trust Act** in so far as it relates to the export trade. The Act is for the purpose of promoting export trade of the United States, and declares in Section 2 that the Sherman Act does not apply to associations actually engaged in or organized solely for the purpose of carrying on export trade if—

1. There is no restraint of trade within the United States.
2. There is no restraint of the export trade of any domestic competitor of such person or association.
3. Such export association does not in any way, within or without the United States, do any act which intentionally or artificially increases or decreases prices in the United States of the goods exported.

The Webb Export Act also enlarges the jurisdiction of the Federal Trade Commission by prohibiting unfair methods of competition in the export trade by American firms against American competitors even if done in foreign countries and which ordinarily would be outside of the territorial jurisdiction of the United States (40 Stat. 516, Section 4).

SECTION 28

INVESTING SURPLUS FUNDS

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SECTION 28

INVESTING SURPLUS FUNDS

The purpose of this section is to give a practical working knowledge of th investment security market which will be of assistance to financial managers The information given has been selected primarily with a view to enablin those who are charged with the investment of corporation surplus funds t avail themselves more readily of the services of banking connections, investmen banking houses, independent financial services, etc.

USE OF SURPLUS FUNDS.—The term "surplus" as used in this chapte has little bearing on the term "surplus" as viewed by the accountant. A cas balance may be available even when the balance sheet shows a corporate deficit Surplus cash or funds, then, may be defined as the actual cash on hand in exces of the amount required to maintain adequate bank balances to protect ampl lines of credit, and finance current operations. The acquisition of such fund may or may not be directly under the control of the financial manager, but, on of his duties is to make them as productive as possible, while, at the same time not in any way jeopardizing their availability for such needs as may arise They can be, and frequently are, left in bank subject to check, but as such they command a relatively low return, and it is expedient that they be place otherwise in order to increase the return.

When such a course is decided upon, this "surplus cash" becomes "invest ment funds," and a serious problem arises as to just how it should be investe At such times, advice will be plentiful from all sides, including corporatio directors, officers, banks, and as many security dealers as may learn that inves ments are under consideration. This advice will vary widely, and its diversit will ultimately throw the financial manager back upon his own judgment.

SOURCES OF INVESTMENT FUNDS.—In the main these investment fund will accumulate or arise from the following sources:

Sale of capital assets
Proceeds of new securities sold
Sinking fund reserves
Cash held for current dividends, interest, etc., especially in a business th receipts of which are of a seasonal nature
Reserves to assure regular dividends in future years
Reserves for taxes
Reserves for insurance and other contingencies
Employees' savings, pension, and other benefit funds
Cash acquired for future construction planned
Other cash withheld from distribution, but not to be invested immediatel in the business

INVESTMENTS ON TEMPORARY OR PERMANENT BASIS.—The fir question to be decided is whether or not investments should be on a temporar

or a permanent basis. Generally, investments on a permanent basis are advisable only for concerns of an institutional character, where endowments or like funds are to be retained intact, regardless of periodic fluctuations in business. Temporary investments (investments that may be readily liquidated, as opposed to investments that may have merely early maturities) are preferable for practically all industrial, commercial or trading concerns. These organizations must maintain a thoroughly **liquid position** in order to be prepared to take advantage of trade needs and opportunities as they arise.

The above advice treats all surplus cash as working capital, and assumes that the time when it will be needed in the operations of the business cannot be determined beyond the period of a very few months. But a review of the sources of accumulation, as tabulated above, indicates that in some instances surplus cash will be available which may properly be invested in longer term securities, on which higher returns are obtainable than can be had on bank time deposits, acceptances, etc.

The most frequently employed **types of securities** are included in the following list:

U. S. government certificates of indebtedness and notes
U. S. government bonds
Bank acceptances
Bank certificates of deposit
Commercial paper
Called bonds for redemption for which funds are on deposit with trustees
Short-term notes and early maturing bonds of established and recognized industrial, public utility, and railroad corporations, cities, counties, states, and foreign governments.
Railroad equipment trust certificates
Real estate mortgages
Intermediate term bonds (2 to 10 years)
Long-term bonds
Preferred stocks
Common stocks

Temporary Investments

U. S. GOVERNMENT OBLIGATIONS.—These represent absolute safety of investment in so far as that is attainable, and thus reflect to a greater degree than any other type of security the actual cost of borrowed money. During and immediately after the World War, **Liberty and Victory bonds** were purchased in unusually large amounts by corporations, as a matter of patriotism. Because of this, even the most conservative bankers who ordinarily insist that only those items which will be liquidated in the ordinary course of business may be listed as current assets place Liberty bonds in that section of the balance sheet. Many of these Liberty bonds have since been disposed of in one way or another, but they always maintain their position as the surest and most liquid investments of any corporation.

It is nearly always possible to obtain short-term U. S. government bonds, notes, or **certificates of indebtedness.** They are issued from time to time to take care of current Treasury needs. Of late years they have been available in a great variety of maturities, because of the large Treasury operations in adjusting and consolidating the swollen national debt. Their almost complete freedom from risk should never be lost sight of, and though higher rates can be had, the difference in the very early maturities is so small as always to entitle them to favorable consideration for purposes of temporary investment.

BANK ACCEPTANCES.—These acceptances are being more widely recognized as one of **the safest and most attractive short-time investments** on the market. They are included in the daily offerings of some large investment banking houses, discount houses and acceptance banks. On the acceptance as an investment the International Acceptance Bank says:

"In regard to the security of bank acceptances we cannot do better than to quote from an article published some time ago by the First National Corporation: 'From the point of view of security, a bank acceptance is analogous to a certified check, in that it constitutes a primary obligation of the drawee and of any endorsers whose names may appear upon it. Unless issued to create dollar exchange, in which case the drawer must be a bank or banker, it is always based upon a commercial transaction, supported by the customer's agreement with the bank to place the latter in funds in advance of maturity, and often by his pledge of actual goods involved. In due course, it is liquidated by the sale of goods and is, therefore, essentially self-liquidating. But the holder of a bank acceptance is not dependent upon the completion of the commercial transaction for the collection of his funds, since his paper is the direct, unconditional obligation of the accepting bank to pay. It is secured by the bank's entire resources, and must be honored, even though the taker of credit should default on his part of the undertaking. The security of principal is, therefore, of a high order, and, where the accepting bank is well known, the question of safety is rarely raised.'

"A great advantage of bank acceptances is that they may be procured to meet almost the exact requirements of any maturity up to six months, and that furthermore, should it be desired to realize upon the investment before the anticipated maturity, bank acceptances, if held by a third party, are salable in the open market at a moment's notice with the holder's endorsement and if endorsed by a member bank or other approved name as third party, they are bought freely by the Federal Reserve banks. In this way they combine adaptability to various needs with the highest degree of liquidity.

"All national banks are permitted to invest in bank acceptances without regard to the 10% limitation of loans to one borrower, which is imposed by the National Bank Act and which applies to purchases of single-name commercial paper. Moreover, State banks and trust companies, as well as savings banks and insurance companies, are being given the right to buy such paper in an increasing number of States, and during recent years, the acceptance has become extremely popular with these and other large corporations, as a means of affording liquidity, security, and at the same time, a good yield for their short-time funds."

BANK TIME DEPOSITS AND BANK CERTIFICATES OF DEPOSIT.—Time deposits and certificates of deposit are practically the same, only differing in that the one is in the form of an account and the other is evidenced by a certificate. The rates on them vary considerably in different sections of the country, usually being lower in New York than in other localities. This medium of investment is **well suited to the temporary employment of funds.** There is, however, the chance of some loss of interest in the event that funds are withdrawn prior to the specified date. There is also the ever-present possibility that the bank of deposit may exercise its legal right to hold funds to the maturity of the certificate, or delay re-payment of a time deposit a certain number of days after notification of withdrawal as set forth in the deposit agreement. Such difficulties are so rarely encountered, however, that money on time deposit is generally regarded as immediately available.

COMMERCIAL PAPER.—This is one of the chief forms of short-time investment used by banking institutions. As it describes the securities quoted daily in the financial sections of metropolitan newspapers, the expression "commercial paper" designates notes of business firms and corporations **sold through brokers,** or sold directly to houses who buy commercial paper and re-offer it to banks and others who desire liquid, short-time investments. If the notes have been endorsed by the drawee, they become **two-name paper.** When both drawer and drawee of the note are of recognized credit standing, the notes become "two-name paper; best names," and as such, command a low rate.

The **degree of safety** of commercial paper as indicated by long experience is high. Thus a prominent New York trust company which had purchased upwards of $200,000,000 market paper in 10 years, suffered losses on that amount of only about 1/40 of 1%, or $50,000. However, commercial paper, by its very nature, involves much greater risk on the part of the purchaser than do prime bank acceptances, and in choosing between the two, it is doubtful if the income which a corporation derives from outside short-time investment is of sufficient importance to warrant the assumption of the added risk.

Commercial paper is marketed principally through established commercial paper houses in the larger cities of the country, and can be obtained either through them, or through the services of metropolitan banking connections.

CALLED BONDS.—This class of bonds, for the redemption of which funds are available, or maturing bonds, for which provision has already been made either through sale of other securities or accumulation of cash, constitute **desirable temporary investments.** They can occasionally be obtained from dealers who have accepted them in exchange for other securities. Maturities will usually be no more than **two months distant,** though sometimes longer. For example, the Baltimore & Ohio Railroad sold $75,000,000 First Mortgage 5s in August, 1924, to provide for retirement of a like amount of Prior Lien 3½s, due July 1, 1925.

SHORT-TIME NOTES AND EARLY MATURING BONDS.—These include a wide range of maturities from 6 months to possibly as long as 6 or 8 years, although the securities known in bond circles as "short-time stuff" are rarely of longer terms than 4 or 5 years. They are **in great demand** by financial institutions, trustees, corporations, and individual investors who carefully diversify maturities. A short-time issue may sell on a much lower yield basis than a longer term issue having exactly the same security, just as the Missouri Pacific Railroad First and Refunding 5s, due August 1, 1926, were selling early in 1925 at 101¼, to yield 4.80%, while the 5s due 1965, secured under the same mortgage, sold at 85½, to yield 5.95%. Well known short-term bonds and notes reflect to a marked degree their actual safety in market price. It is possible to foresee clearly the maturity date, and if redemption appears certain, the price level will be close to par, while if there is any uncertainty in the situation, the price will be substantially below par. Thus in the latter part of 1924, though President Byram of the Chicago, Milwaukee & St. Paul Railway was widely quoted as stating that no reorganization was under contemplation, still the road's General and Refunding 4s, due June 1, 1925, sold around 74½, reflecting doubt on the part of the investing public. On March 18 the road was placed in the hands of receivers.

Notes and short-term bonds are issued for many purposes and these purposes should be closely scrutinized by prospective purchasers because the **means of redemption** should be apparent at the time. If the borrowing corporation or government has long-term bonds outstanding, it will be well to note their

investment and market position as an indication of ability to accomplish necessary refunding. In times of high interest rates, strong companies frequently find it expedient to improve their current credit and working capital situation by short-term financing. Under such circumstances, only the most firmly established business should be favorably considered by the investor, and it should be that fixed assets are ample to provide a basis for any financing found to be necessary for redemption of the note issue—or that either serial or sinking fund redemption out of earnings is provided. An example of such financing was the Standard Oil of California 7s, issued in 1921 and due in 1931, which were called in 1923 and refunded with 5% bonds. Notes may also be of a commodity collateral nature, similar to Copper Export Serial 8s, issued to assist the large copper producers in carrying temporarily excessive stores of refined copper. The Sinclair Crude Oil Purchasing 6s, due 1928, are another example. Though not actually secured by the commodity, the company covenants to maintain quick assets (as specified) equal to 125% of aggregate liabilities. Many other examples can be found, and in all those commanding prices around par, it will be seen that payment at maturity is almost a certainty.

Such securities have a **ready market** and **fluctuate but slightly** in price so that they are suitable for investment as reserves for dividends to be paid in future years, parts of insurance and benefit funds, and cash held for proposed construction.

RAILROAD EQUIPMENT TRUST CERTIFICATES AND NOTES.—Although properly coming under the heading of "railroad bonds," these constitute an unusual type of security, and are regarded by so many investors as occupying a class alone, that they should receive special comment. These securities are discussed by the National City Company in a pamphlet as follows:

"Issued under properly drawn instruments, either the so-called '**Philadelphia Plan**' or an **agreement of conditional sale,** these equipment trust certificates are protected as to security by an absolute title to valuable railroad equipment, which **title is vested in the trustee** until all outstanding certificates and dividend warrants have been paid and all obligations under the trust agreement discharged.

"In creating an equipment trust, a certain percentage of the purchase price is paid in cash by the railroad company. . . . In most of the recent trusts the cash payment has been 20% to 25%. This means that from the very beginning there is a substantial equity in the trust equipment that protects the trust obligations issued against it. As the trust obligations are usually issued with serial maturities, and these are paid off more rapidly than the equipment depreciates in value, this equity instead of growing less, constantly increases, so that the later maturities as the maturity date approaches become the most valuable from the standpoint of safety.

"The real test of a security, after all, is the treatment accorded in the case of financial difficulty of the issuing corporation. The general rule is, that equipment trust agreements in case of receivership are carried out according to their terms. Should the railroad company be guilty of a violation of any of the terms of the trust agreement constituting a default, the trustee has the right at once to take the equipment.

"Title to the trust equipment being vested in the trustee until fully paid for, it has been well settled by decisions of the United States Supreme Court that the after-acquired property clauses of the carrier's mortgages cannot attach so as to give such mortgages a lien on the equipment, as such lien can attach only to property to which the carrier has title.

"Another excellent feature of these obligations is their market stability. The price fluctuations of the early maturities are very slight and the price movement of the longer maturities is as closely related to the money rate as is the price movement of the very highest grade long term mortgage bonds. . . . Probably no form of investment has a stronger economic background of necessity than equipment trust certificates, issued to pay for rolling stock used on American railways."

REAL ESTATE MORTGAGES.—These constitute one of the oldest forms of investment securities and are recognized as one of the safest. Computations showing the aggregate investment of the larger life insurance companies in this country indicate that approximately 50% of their funds are in real estate mortgages and real estate mortgage bonds. If their degree of safety is judged by considering the character of other insurance company investments, it will be apparent that for an equal security, real estate mortgages **yield a greater return** on invested capital. In considering their suitability for the employment of corporation funds, however, it is important to observe that they **lack marketability.** This is especially true of single mortgages, and even in the issues of **real estate mortgage bonds,** which frequently run into millions of dollars for a single issue, their market usually depends upon the single firm by which the bonds were originally distributed. Some of the houses which specialize in first mortgage real estate bonds have splendid records, and they are constantly improving the marketability of this class of security. The reputation and record of the underwriters is of the greatest importance in studying bonds of this class.

This type of investment, if selected with the utmost care, may be suitable for employees' savings and benefit funds, and for reserves set up to insure dividends in future years. But such funds should also include a large amount of more readily salable securities in order to assure the availability of ample funds for any emergency.

INTERMEDIATE TERM BONDS.—These are securities maturing within approximately 7 to 12 years, and because they are in demand by neither institutions seeking short-time investments nor savings banks, insurance companies, individuals, etc., seeking long-time investments, they frequently afford attractive opportunities when chosen with careful consideration, not only for safety but also for immediate and prospective market position. They are well suited to the investment of money laid aside for construction and new properties in future years, as well as for other funds which are not to be used in financing current operations.

When **serial bonds** are sold, investment bankers frequently find that the early and late maturities are taken first, while the intermediate maturities, unless offered at very attractive prices, may be a drag on the market. Examination of seasoned issues of intermediate maturity frequently indicates that they are selling at very attractive prices. For example, early in 1925 the Baltimore & Ohio 6s, due 1929, sold at 103¼, to yield 5.10%, while Baltimore & Ohio 4½s, due 1933, having approximately the same investment status, sold at 92, to yield 5.75%. A purchaser of the 4½s maturing in 8 years may reasonably expect that within 4 years his bonds will still sell at a 5.75% basis, or a price of 95½. By that time, however, they will be "4 year bonds," and in such demand that, other things being equal, they may be expected to sell at a 5.10% basis, or a price of 97¾. If disposed of then, the yield will have been much more than the 5.75% originally anticipated.

LONG-TERM BONDS.—These should be purchased only after a careful examination of their immediate investment status, and considerable thought as to what developments future years may bring for the obligor. It is impossible to foresee definitely what conditions may prevail at the time of their maturity, and for this reason it is highly important that their status with respect to security be **checked at more or less frequent intervals.** It is a common occurrence that investors who purchase securities only after long and thorough investigation will place them in strong boxes and consider the work of investment completed. Then at some time in the future years, a coupon is returned, marked "No Funds Available." By that time, the worst has occurred, and the company has probably already been placed in the hands of a receiver. But business failures of large corporations, particularly those which make public the details of their financial conditions from time to time, usually may be foreseen sufficiently far in advance to save the greater part of the ensuing loss.

For an equivalent change in "yield to maturity" the prices of long-term bonds fluctuate much more widely than do the prices of short-term bonds. For example, the price of a 60-year 4% bond selling on a 5.50% basis is 73¾ and the price of the same bond on a 5% basis is 81. On the other hand, the price of a 5-year 4% bond on a 5.50% basis is 93½ and the price of the same bond on a 5% basis is 95⅝. In one case there is a change of 8¼ points, and in the other only 2⅛ points. In a later paragraph, under the heading "The Movements of Bond Prices," the fact is brought out that bond yields fluctuate with the **changing phases of the business cycle.** It will be evident that by shifting funds back and forth between long- and short-term bonds, the astute trader can make substantial profits. If these investments are confined always to the highest grade securities, there is little chance for monetary loss. In a period of high interest rates and low bond prices, the long-term issues should be purchased. When interest rates have fallen with a corresponding rise in bond prices, the bonds originally purchased may be profitably disposed of and the money re-invested in short-time issues to be thus held until another period of high interest rates prevails, when the long-term bonds may again be bought for the rise. It is to be observed that such trading requires the devotion of much time and study to the subject and the best practical advice available on economic conditions should be obtained.

PREFERRED STOCKS.—These are purchased by many investors who feel that the return on high-grade bonds is too low, and are yet unwilling to assume the speculative risks believed by many to be inherent in the ownership of common stocks. At the present time (1925) **public utility preferred shares** are in particular vogue and, on the whole, they have been very desirable investments. It has come to be an accepted policy in financing utilities that the property may be properly bonded to form 60% to 75% of the construction cost and the remainder of the needed capital supplied through sale of preferred stock, leaving the common stock as a capitalization of earning power. As a matter of fact, the better preferred shares in this group have from $200 to $400 property value behind each $100 share after deducting the par value of all funded debt, using generally appraisal figures for property value. Many utilities in all parts of the country have carried on successful campaigns for so-called "customer ownership" through sale of preferred stock in the territories which they serve. Obviously, such procedure greatly enhances the companies' good will, and has helped to popularize this class of investment.

A large number of railroads have no preferred stock issues, and many of such security issues which are outstanding were originally the outgrowth of reorganization. Most of the **railroad preferred stocks** available have been

outstanding for a number of years, and have thus become well seasoned in investment and market position, so that the genuine investment issues among them are not difficult to select. On the whole, financial managers of railroads appear to find it more expedient to obtain new capital through the sale of bonds, common stocks, or convertible bonds which they hope will later be converted into common stock.

Industrial preferred stock issues have come to be a familiar part of the security market. Some of them, such as U. S. Steel and General Motors preferred stocks, have large equities and are backed by earnings many times the dividend requirements. Our greatest industrial organizations, however, have grown principally through the plowing back of earnings into property. Their original plans for financial structure have not usually included provision for preferred shares, but the preferred issues do work into situations when new capital is needed which common stockholders are hesitant about providing, or when great consolidations are financed. As a whole, new issues of this type offered in recent years have not an inspiring record. Professor Dewing of Harvard reports that the results of an investigation showed that out of 607 industrial preferred issues offered to the public between June 1, 1915, and June 1, 1920, it was found that by January 1, 1923, no quotation could be found for 70; 114 were quoted at less than 25% of par; 169 were quoted between 26 and 90; while 200 were worth 91 or more, and 54 had been retired.

Some corporations invest a portion of their employees' benefit funds in preferred stocks, but they should be chosen with the greatest caution. As a class they are barred from a share in management of the business, from larger earnings which may accrue to common stocks, and in the event of receivership, their position is very weak as compared with secured bonds.

COMMON STOCKS.—These as a class have long been regarded as the **greatest single medium of speculation,** characterized as they are by wide fluctuation in market values and the risk of varying profits inherent in ownership of a business. The feeling has become imbued in a large body of investors that only funds on which they could afford to "take a chance" should go into even well seasoned common stocks, while the real "investment funds" should be placed entirely in high-grade bonds. This long established principle has been occasionally shaken by earnest students of the subject and a great deal of comment along this line has been caused recently by a book entitled "Common Stocks as Long Term Investments," by Edgar Lawrence Smith.

Mr. Smith's investigations, covering the last 60 years, indicate in a rather conclusive manner that, in the long run, investors in seasoned and diversified common stocks have in the past fared much better financially than have investors in high-grade bonds. It should be noted, however, that this treatise was undertaken and is presented for the individual investor, and its conclusions while pointing out certain merits of common stock investments, do not by any means indicate that bonds are obsolete as investment securities. In fact, Mr. Smith makes the following interesting comments regarding the investment of banks and insurance companies, which will apply in large part to corporation outside investments:

"Their investments are all made to protect dollar obligations. Their sole concern is so to conduct their affairs that they will always have available more dollars than they will be called upon, under their commitments, to pay out, at the same time deriving a profit above operating expenses. It is natural and right that the highly trained specialists whom they employ to guide them in their financial policies should concentrate their attention upon promissory obligations payable in a fixed number of dollars, amply safeguarded against

the shrinkage in value of the particular properties by which they are secured, even though they are not in the least safeguarded against the possible shrinkage in the purchasing power of the dollar itself. These financial institutions are also subject to the necessity, at times, of converting a very substantial part of their investments into liquid or currency form, which is not normally true of the individual investor who has the future welfare of his family as his main investment purpose.

"These institutions are called upon periodically to present a balance sheet of assets and liabilities in the form of annual statements, etc., and cannot afford to take the chance of having their security holdings show temporary shrinkage in market."

The purchase of common stocks of affiliated and subsidiary companies when deemed expedient will nearly always be a matter of business policy, and will be made from funds which do not come strictly under the heading of investment funds as described at the beginning of this chapter. Some large and successful corporations have substantial outside common stock holdings. For example, E. I. du Pont de Nemours & Co. owns a large block of General Motors Corporation Common, and the du Pont interests have for some time been closely identified with the management of General Motors. Union Pacific Railroad is a heavy owner of stocks of other railroads, a part of which were acquired when it was forced to relinquish control of Southern Pacific. The United States Steel Corporation, on the other hand, carries $100,000,000 United States government bonds as an investment of its depreciation and depletion reserves.

General Investment Principles

DISTRIBUTION OF RISK.—The distribution of risk or "**diversification,**" as it is sometimes called, is recognized as one of the cardinal elements of sound investment. This does not mean than an investment of $20,000 should be distributed among 40 different issues in denominations of $500, but for such an investment, the selection of 5 issues in amounts of $4,000 each would be reasonable. The degree of diversification depends somewhat upon the average conservatism of the investor. For one who is perfectly willing to accept the low rate available on U. S. government bonds, the factor will be unimportant, although even in that event it will be found advantageous to distribute the investment among various maturities, since even government bonds vary in price with changes in the general level of interest rates. An investment account consisting largely of securities other than U. S. government bonds should be distributed among the various types of securities, namely, railroad, public utilities, industrial corporation, foreign governments, real estate mortgage bonds, etc., and diversified preferred and common stocks, if they are found to meet the given requirements, considering in each case the suitability of the particular type of security.

Within the various groups the element of diversification should be continued. For example, in purchasing railroad bonds, it will be found that different roads are dependent to a greater or less extent upon certain kinds of traffic, and it would be wise to select them with this point in view. The **diversification as to maturity** is also of considerable importance, because the constant reinvestment of funds arising from maturing bonds places one in a position always to take advantage of such opportunities as may arise. There is also the importance of **geographical distribution.** For instance, if all funds should be invested in securities of hydro-electric companies depending upon one section of country for water supply, a severe drought or lack of snowfall in the mountains might

seriously affect net earnings of all the companies; or the market for real estate mortgages, all secured upon property in and about one large city, might be harmed by a severe local industrial depression. In a list of securities selected with the principle of diversification in mind, there will always be a substantial amount which can be readily marketed without loss, no matter what situation or conditions may prevail with respect to money rates in general.

MARKETABILITY.—This is another desirable factor, which, as already stated, must be paid for in one way or another, and for a corporation is well worth the cost. A **ready market** is established in many ways, and depends upon such varying factors as the amount of the issue outstanding, the reputation of the borrowing company among investors throughout the country, the character of investment distribution which is accomplished by the underwriters of the issue and security dealers throughout the country, the operations of a sinking fund, and whether or not the issue is listed on an exchange. These are all points which should be inquired about in considering any investment security. It is not wise, however, to place too much emphasis on the matter of stock exchange listing, because some of the largest and best known bond issues which have ready markets in practically every important city are not listed.

NOMENCLATURE OF BONDS.—The name of a bond issue should always be selected with the greatest care, since from the name alone, considerable should be learned regarding the exact nature of the security. These names or titles, however, may be very misleading, and will therefore bear careful study. In the following list is given the meaning of the more common bond names.

A Mortgage Bond is secured by definite pledge of physical property.

A First Mortgage Bond is secured by property, and has first claim against earnings of the pledged assets and against the property itself in the event of liquidation.

Second and Third Mortgage Bonds have claims against property covered in the order named.

A First and Refunding Mortgage Bond must be a first mortgage on some part of the company's property, but the amount of property on which it is a second or third mortgage may be much greater than that on which it is a first mortgage. The word "refunding" simply means that the issue provides for refunding other outstanding bonds. (See "Refunding Mortgage" below.)

A First Mortgage Secured or **First Mortgage Trust Bond** is one secured by deposit with a trustee of first mortgage bonds.

A First Lien Bond may be a first mortgage bond, or it may be only a first lien on a portion of the company's property by virtue of certain **first mortgage bonds pledged as collateral.** The error is sometimes made of considering "first lien" as synonymous with "first mortgage," but such is not the case; the security behind a first lien bond should be carefully examined.

Purchase Money Mortgage Bonds are secured upon property purchased by the corporation and are frequently issued in order to escape restrictions of a previous issue which requires that **"after acquired" property** should be pledged under it.

A Refunding Mortgage is one which provides for retiring and refunding the various outstanding underlying mortgage bonds. It may authorize the issuance of a limited amount of bonds and make special reservations for amounts necessary to refund specified issues, or it may on the other hand be a so-called **"open end mortgage."** In the open end issues, it is customary to provide that additional bonds may be issued to refund maturing bonds and to provide

additions, improvements, and betterments up to 75 or 80% of their cost. In examining such a bond issue, it is well to note the issuance restrictions, and also whether or not provision is included to the effect that no more bonds of underlying issues may be sold to the public.

A First Refunding Mortgage Bond will probably not be secured by first mortgage on any property whatever—the word "first" simply meaning that, of the refunding mortgage bonds which the company has issued or may issue, this is the first in number. The term is often misleading, but bond underwriters frequently take advantage of any excuse to use the word "first."

Prior Lien Bonds are simply bonds which have prior claim over some others. In many cases, they are junior themselves to lesser or greater amounts of underlying bonds.

Consolidated Mortgage Bonds are bonds secured upon properties that have been consolidated. There may be variations of this name such as **consolidated first mortgage bonds** meaning a first mortgage on consolidated properties; **first consolidated mortgage bonds** meaning the first in number of consolidated mortgages; or **first and consolidated mortgage bonds,** meaning a first mortgage on part of the property and junior mortgage on other consolidated properties.

Unifying Mortgage Bonds, as a title, are virtually synonymous with "consolidated mortgage bonds" and the same variations may be found.

Extension Bonds are found principally in the railroad field and usually designate bonds secured on branch or main line extensions into new territory.

General Mortgage Bonds are usually secured by a blanket mortgage upon most, if not all, of the company's property, subject to underlying divisional and other outstanding mortgage bonds. The majority of such issues also provide for refunding underlying bonds. They are often called **general and refunding,** and in such cases the underlying obligations should be studied.

Development Mortgage Bonds and **Improvement Mortgage Bonds** provide for financing development and improvement, as the names imply. They nearly always are also of the character of general and refunding mortgages. These names are frequently combined into **development and general mortgage, refunding and improvement mortgage,** etc.

A Collateral Bond or **Collateral Trust Bond** is one secured by pledged bonds or stocks. They are often issued to finance ownership of controlling stock interest in one company by another. In such cases they may be found to rank about with debenture bonds of the issuing company, because in most instances, a receivership would find the stock pledged to be of small value as the ultimate security.

A Debenture Bond is an unsecured promise to pay. When a corporation issues debentures, it frequently protects investors by a covenant to the effect that it will not in the future pledge or mortgage any of its assets, unless equal provision is made for the debentures. This is called the **"negative pledge clause,"** and while some fairly good issues do not contain it, it is certainly an important safeguard.

A Convertible Bond is usually convertible into preferred or common stock of the company under stated terms. They are generally debenture obligations, and have been highly profitable investments, by virtue of their convertibility, in many instances. They should be bought, however, only on their investment merits.

Receivers' Certificates are issued by the receiver of a company in financial difficulties, and seldom are for periods exceeding 5 years. As an expense of the receivership, they have prior claim against the assets of the company, and are usually highly regarded by investors.

Adjustment and Income Bonds are generally the outgrowth of reorganizations. Interest payment on them is not a fixed charge, but is contingent upon its being earned and declared by the directors. They are thus somewhat of the nature of preferred stocks, and may or may not be cumulative.

Guaranteed Bonds, as the name implies, are guaranteed or **assumed** by some other company. A guarantee may raise a weak mortgage bond to a high investment rating by placing behind it credit of recognized strength, but if one looks ahead to possible receivership of the guaranteeing company, it is well to note what other security the guaranteed bond has.

Railroad Terminal Bonds are the obligations of companies set up by one or more railroads that own and operate important terminal properties. In general, they constitute well secured investments, and are frequently guaranteed by the proprietary railroads, in order to enhance the investment position of the bonds.

Closed Mortgages are those under which no additional bonds may be issued. An investor in them is assured that his security cannot be diluted by heavy borrowing on any equal security basis in the investment market in the future. Bonds of closed issues frequently attain a scarcity value which enhances their market position.

Gold Bonds, when the term is applied to bonds payable in U. S. funds, means that the principal and interest are payable, upon demand, in U. S. gold coin of present standard weight and fineness. After seeing bonds in nations such as Germany become almost valueless because they were payable in depreciated currency, the advantage, in a possible emergency, of owning gold bonds is fully apparent.

Bond Prices and Bond Yields

CALCULATION OF YIELD.—Bond prices should be regarded as functions of yield, which they actually are, and in buying a bond the yield to maturity should be given primary consideration rather than the price itself. The factors which determine yield are price, maturity, and nominal or coupon rate. Yield is the only common basis of comparison for all maturing obligations. For example, in April, 1925, Louisville & Nashville First and Refunding 4½s, due 2003, were selling at 94½, while the 5% bonds, secured under the same mortgage, and also maturing in 2003, were selling at 105. The prices themselves gave no indication as to whether or not one bond was a more attractive purchase than the other. Reference to the yield tables, however, showed that at the prices named, the yield on both issues was almost exactly 4¾%, indicating that they were equally favorable purchases at that time.

The **exact calculation** of yield involves long mathematical processes of little interest to the investor, but the following brief definition may help to clarify the subject. If it is considered that a bond is actually composed of a number of promissory notes of which the face of the bond is one note and each coupon a separate note maturing on different dates, and if it is then considered that in purchasing a bond the investor actually discounts each individual note (compounding semi-annually), then the yield is that rate of interest at which the present worth of the face of the bond, plus the present worth of each coupon, will equal the present cost of the bond. The amount of interest accrued since payment of the last coupon is generally added to the cost of the bond, but accrued interest is not considered in computing yield.

An **approximate method** of figuring yield which gives an idea of its make-up, but contains some inaccuracies corrected in computing the tables, is supplied by the financial editor of the New York *Herald Tribune* as follows:

"To figure the precise yield on a bond, it is necessary to use yield tables, but the approximate yield can roughly be figured out by the following formula: Divide the closing quotation on a bond into the rate of the annual return. If a bond is selling below par, you must allow also for the appreciation of the principal. To do this, subtract the market quotation from par, or 100, and divide the remainder by the number of years the bond has to run before maturity. For example: If a 6% bond is selling at 90 and has 10 years to run, the annual return will be 6.66%. The difference between par and the market price will be 10 points, subtracting 90 from 100. Divide 10 points by 10 years, the quotient will be 1. This figure is to be added to 6.66%, which is the annual return, and the result, 7.66%, will give you the approximate yield."

The exact yield from the tables would be 7.43%.

It is to be noted that actual prices serve the purpose of bond trading and of shading yields up or down, and it will also be observed that in long-term bonds, a large change in price causes a relatively small change in yield, while in the early maturities, a small change in price will cause a relatively large change in yield. This point should always be kept in mind in considering the future market position of any issue.

Nowadays most large banks have bond departments which can supply yields on any bond at current quotations, and investment security dealers will also be glad to supply such information. The market position of bonds should be judged by yields and comparisons with other issues of similar character made on that basis. Such comparisons will frequently show that issues selling above par carry higher yields than those below par. This is partly due to the fact that many individuals will not take the trouble to amortize systematically a premium, but want always to see their capital grow. Consequently, many genuinely attractive investments can be made in bonds selling above par, and such opportunities should not be lost sight of.

MOVEMENTS OF BOND PRICES.—These movements have been the subject of much theorizing, and it is perfectly evident that with changing levels in interest rates, the general levels of bond prices do rise and fall. It is an extremely difficult problem though to "catch the market." That is one reason why bond maturities should be diversified—such distribution will assure average good yields through all the ups and downs of the market. On this interesting subject Professor Vanderblue of Harvard says:

"When the business cycle enters the prosperity phase, the demand for funds for industrial enterprise becomes increasingly heavy. Commercial paper rates tend to rise. Investments in bonds are disposed of in the open market by banks, industrial concerns, and others to secure funds for business purposes, and as a result, bond prices fall—that is, bond yields rise. During the liquidation and depression periods of the business cycle, on the other hand, the inactivity of trade decreases the demand for commercial loans, and funds are released for the purchase of bonds. Commercial paper rates fall, bond prices rise, and yields fall. At such a time, commercial paper rates fall below bond yields, and it thus becomes more profitable to buy bonds than to loan money for short term transactions. Cheap money, in turn, tends to stimulate business, and leads to a repetition of these movements of business and interest rates."

Selection of Long-Term Bonds

RAILROAD BONDS.—These can be more readily selected and their investment position more easily checked up from time to time than other types of

corporate security. A wealth of information is available regarding them through long records of corporate development, maps, etc., published in various reference books, and monthly reports of operations and earnings to the Interstate Commerce Commission. Concerning their safety, Moody's "Analysis of Railroad Securities" says:

"Excepting government securities, railway underlying mortgages still rank at the top of the whole investment list. They are better secured by assets than most public utility issues and they are so well protected by earning power that the alternation of depressions and booms hardly affects their safety at all. They sell on a strictly income basis, and their prices decline but little except in panics when investors are selling anything salable, or in times when the general price of capital rises rapidly. They are a good cash equivalent, suitable for trustees and estates, and are as safe as money deposited in almost any bank."

An article on the subject of buying a railroad bond which appeared in Barron's *Financial Weekly* of January 7, 1924, contained the following:

"The prospective purchaser of a railroad bond needs to ask two questions to determine its relative safety: How remote is the likelihood that the road may go into receivership? What will happen to the bond in question, if it does?"

To answer the first question, a good map of the road, information regarding the character of traffic, and a record of earnings and their disposition over 5 to 10 years should suffice. A soundly constructed railroad should justify its existence by providing necessary transportation between traffic centers, or between points of origin of commodities, materials, and passengers, and their destinations. If its traffic is of a diversified nature, a depression in one industry will not cause difficulties such as hard times in the Northwest have helped to bring upon the Chicago, Milwaukee & St. Paul Railway. The earnings should show a healthy growth over a period of years. The **amount available for interest charges** must show a comfortable margin of safety (two times is a fair and average figure) and the amount carried to surplus and plowed back into the property should be sufficient to enhance equities gradually.

In taking up the second question, the **actual security of the bond** must be studied. Speaking broadly, the more mileage covered by an issue the better, and, other things being equal, a mortgage on main line is superior to one secured on branch line mileage. In more than one railroad receivership, unprofitable branch lines have been turned over to their bondholders and either abandoned or sold back at a great loss to the original investors. Even in the event that a road in whose bonds an investment is held does fail, the wonderful history of the railroads of this country will give one courage. Some of our strongest systems today have at one time or another passed through receivership—witness: The Atchison, Topeka & Santa Fé, probably the premier railroad of the United States.

PUBLIC UTILITY BONDS.—These as a class cover a wide range, including the obligations of electric, gas, telegraph, telephone, and traction companies. Railroads also are properly included in this group. The term "public utilities" as generally used, however, has come to refer specifically to **electric light and power companies.** The period covering the past 10 or 15 years is often spoken of as the "Age of Electricity." The tremendous growth in use of electricity has made necessary the raising of huge sums for new capital expenditure. Recognizing this need, public authorities have been generous in allowing companies to earn fair returns on property, and this right to earn a fair return on the value of property devoted to the business of providing public services has been frequently upheld in the highest courts of the land.

The progress of the electric industry has differed from the period of develop-

ment of some of our western railroads, in that modern investment banking methods have largely eliminated financial excesses, and have greatly helped in establishing the public utility industry on what appears to be a stable and firm foundation. It is generally felt that secured bonds of established and successful public utility operating companies form **one of the most desirable forms of long-time investment** available today. It is, nevertheless, true that considerable care should be exercised in the matter of choice. For general analysis purposes, a list of questions, under the heading "10 Tests of a Sound Public Utility Bond," printed in pamphlet form by Halsey, Stuart & Co., serves very well. The tests are as follows:

1. Is the territory served desirable?
2. Is the management capable and experienced?
3. What is the nature of the lien?
4. Do the earnings show a satisfactory margin of safety?
5. What is the valuation of the properties?
6. Are the mortgage provisions carefully drawn?
7. Is the franchise situation satisfactory?
8. Is the issue assured of reasonable salability?
9. Is the yield consistent with prevailing market conditions?
10. What is the character of the sponsors of the issue?

These are questions which may properly be asked before investing, and if the answers compare favorably with similar data regarding issues of recognized and undoubted character in the field, there is little chance of error.

Bonds of public utility holding companies are not in the same category with those secured upon the property of operating companies. Many of these holding companies have been formed to control several operating companies through common stock ownership. The holding companies issue bonds, either as debentures, or secured by the common stocks owned. In some cases, the pledged stocks actually represent little more than capitalized earning power, and, in any event, it is apparent that such securities are, as a class, not yet sufficiently established through years of depression as well as prosperity for the industry to warrant their classification among the highest grade bonds.

Trolley and interurban lines have been on the decline as a group, due, especially, to automobile and motor bus competition, and to increasing costs of operation. While a few companies in the traction field continue to be financially successful, and no satisfactory substitute has yet been found for rapid transit lines in congested metropolitan districts, the great number of failures in the traction group is an indication of the hazards involved in that particular division of the public utility field.

INDUSTRIAL BONDS.—These as a class of securities include the funded obligations of manufacturing, mining, trading, shipping, and all other corporations, except those of strictly public utilities, or steam railroads. Industrial securities are **more difficult to select and watch** than any other type because of the diversity of the nature of such enterprises and the countless unforeseeable factors which may inject themselves into an industrial situation. The majority of railroads and public utilities are vitally necessary to the every-day life of communities which they serve, and must continue to operate at all odds; but most industrial corporations could close down completely at almost any time, and there would be others ready immediately to take their places. For this reason the value of industrial concerns depends so greatly upon "going concern" value—it is a well known fact that in liquidations, industrial properties frequently have a cash sale value, amounting to only a fraction of their actual

cost. It is, therefore, evident that as a rule, mortgage bonds of industrial corporations are not properly issuable in so great a proportion to plant value as are utility and rail bond issues. Another principle which follows is that, other things being equal, bonds of corporations occupying prominent positions in basic industries are better than those of non-essential class. This rule has obvious limitations—witness the present (1925) depressed financial condition of the bituminous coal industry, due largely to over-expansion of the industry as a whole.

The **earnings of industrials** tend to fluctuate more widely than do those of utilities and rails, indicating that a wider margin of safety in earnings should be sought. Where an average over a period of years of 2 to 1 in ratio of net earnings to fixed charges for a railroad may be ample, a ratio of 3 to 1, or even 4 to 1, for an industrial, would not be excessive. A broad knowledge of the entire industry in which investment is contemplated is important. Is the particular company in a position to meet **any kind of competition** which may arise? Does its **success depend upon patents, secret processes, or other forms of monopoly** which may not be permanent, or has its record been made in a broad competitive field? Is it a so-called "**one-man concern,**" or is the organization such as to assure continued **good management** under any conditions? These are all questions which may be properly asked. If the bonds are secured upon mining and other property, the value of which will be depleted in regular conduct of the business, then a sinking fund should be provided to assure retirement of debt as assets disappear. In fact, the majority of industrial issues provide for retirement of a part or all of the bonds by maturity.

The wealth of information available regarding past and present conditions of utilities and railroads is a decided point in their favor, and if investors, before buying an industrial security, would demand assurance that such information would at all times be available, much loss might be saved. Some of our largest corporations, such as U. S. Steel and General Motors, publish detailed information concerning their current operations. The N. Y. Stock Exchange has done much to further the cause of intelligent publicity and the reports which the Exchange requires have done much to popularize "listed bonds" among investors.

FOREIGN DOLLAR BONDS.—These are the bonds of foreign governments, states, and municipalities issued in the United States, and payable, principal and interest, in dollars. The bonds of foreign industrial corporations are still so new in this country as hardly to warrant special treatment. The **obligations of foreign governments** also are still relatively new to American investors, but they have been issued in such large volume during and since the World War that their fundamental investment merits have received much study, and appreciation of them continues to grow. Borrowing by one country through the sale of bonds to investors in another country has been going on for a great many years, and European investors are thoroughly familiar with this type of security. The United States, however, prior to 1914 was a debtor nation. Many of our great railroads and other undertakings have been financed partly by foreign capital. America was a new country in the stages of development; interest rates were naturally high and attracted capital. International exchange rates ruled generally at or near their mint parity, so that factor was of relatively minor importance. The World War changed the situation entirely. A large share of the world's gold came to this country, and after the conflict, Europe in particular and the rest of the world in general had to have new capital to rehabilitate industrial life and protect and rebuild stable currency systems.

They naturally turned to this country, and made their loans attractive to American investors by paying high interest rates.

On the whole, these loans have tended to accomplish the results for which they were designed. Great strides have been made toward restoring the natural flow of capital and there are already (1925) some signs pointing toward the time when the old markets, such as London and Amsterdam, will again assume their dominant positions with respect to foreign financing. Unless American investors continue to study and fully appreciate these loans, they may be lost to us in the future.

Undoubtedly, there are many grades of foreign bonds. Statistics showing per capita wealth, per capita debt, exports and imports, revenues, and expenditures, are of value, but are often misleading when considered alone. For example, the bonds of France, which country has a tremendous national debt, and faces (early 1925) really serious financial difficulties, command a better market than do those of Brazil. The per capita debt of Brazil is almost negligible, as compared with that of France, but Brazil has on two occasions suspended certain parts of the service on her loans in London, while France has an unblemished record for promptly meeting all her obligations. International politics, as well as national politics, are important factors, as is also the element of racial prejudice. In fact, public credit depends so largely upon national character and reputation as to overshadow sometimes all other things. National character is one of the most lasting things in the world and once established may be the greatest financial asset of any government.

With respect to the safety of foreign securities, the following from Moody's "Analysis of Foreign Government Securities," is of interest:

"On the other hand, a defaulting government is by no means in so hopeless a position for the investor as a defaulting corporation. The financial history of governments clearly indicates the presumption that adjustment and settlement with the bondholders will eventually be made, almost irrespective of political changes. This sometimes takes years, but there has seldom been a frank repudiation of a bona fide obligation contracted by a government. The recent settlement of the Mexican debt question illustrates this. That state has been in default for more than a decade wherein governments have come and gone, but still it is meeting the claims of the bondholders.

"The Republic of Honduras furnishes another interesting example. After being in default for nearly half a century a settlement was recently brought about; and this has occurred notwithstanding that the bankers who advanced the credit to Honduras were probably more at fault than the government itself. Now we are witnessing advance indications that the time may not be very far off when even Russia will bring order into its financial house. Upon the whole, therefore, national governmental defaults are so small in comparison with the billions of dollars of public bonds issued as to amount to a compliment to the honor of governments and the quality of public securities."

MUNICIPAL BONDS.—These include the obligations of **states, counties, and other political subdivisions** of the United States. This group is recognized as ranking **next in safety to United States government bonds** and has always been widely purchased for safety. The income derived from such bonds is **exempt from all federal income taxes,** so that they are particularly attractive to individuals subject to heavy income surtaxes. The obligations of states and prominent cities are readily salable and are consequently purchased at times by conservative commercial banks. It seems doubtful, however, that the financial manager of an average-sized corporation will have much oc-

sion to invest in securities of such relatively low yield except at times in the very early maturities.

FEDERAL FARM LOAN BONDS.—These are issued by the federal land banks and the joint stock land banks, established under the Federal Farm Loan Act. They are secured by an equal amount of first mortgages on farm property or U. S. government bonds. The bonds are exempt from all federal, state, and local taxation, except estate and inheritance taxes. These banks have been conservatively and successfully operated and their bonds are regarded as high-grade investments. The chief difference between the two classes of farm loan bonds is that all of the 12 federal land banks are jointly liable for all federal land bonds issued, while the joint stock land bank bonds are the obligations only of the particular issuing bank.

INVESTMENT SERVICES.—Local banking connections can be of assistance in the purchase of commercial paper or prime bank acceptances, but such purchases do not require the exercise of much judgment. In the general task of selecting investment securities, inquiries and requests for advice put to the majority of medium-sized banks must necessarily be referred by them to the particular investment bankers in large cities with whom they are acquainted. If the question is referred to a metropolitan banking connection, it will usually be turned over to the bond department of the bank, or an investment banking organization affiliated with it. Occasionally it will be found that some individual connected with a medium-sized bank is really qualified to give counsel on the actual purchase of securitities, but more often than not, the advice requested will come indirectly from an investment banking house.

The term "investment banker" is not well defined as it may mean anything from the small bond dealer who employs the services of two or three salesmen to the large security underwriting and distributing firms who have offices in many cities and representatives covering large sections of the country. These larger organizations are in a position to supply latest available information and figures regarding any security, but they are heavily interested in the investment market for their own accounts, and advice will, at times, be naturally biased. The small dealer, on the other hand, may be in a position to express an unbiased opinion in some cases, but his facilities are not so far-reaching. It appears that the best investment counsel available without cost, therefore, is that of a large investment house of established and conservative reputation. It is to the credit of such firms that, as a rule, they do give sound advice.

The **independent investment agencies** which do not buy or sell securities but make a charge for their services are, as a rule, very reliable. The largest and best known of these agencies are Moody's Investors Service, New York City; Standard Statistics Co., New York City; and Poor's Publishing Co., New York City. They publish manuals of investment information and rate securities. The ratings are valuable helps to anyone endeavoring to ascertain the investment position of a security and they are generally conservative, so that while an investor who limits purchases to issues of the higher ratings may miss some attractive opportunities, it is also true that he will seldom, if ever, get an unsound security. These three companies also maintain correspondence services. Another widely used investment publication is the "Fitch Bond Book," published by the Fitch Publishing Co., New York City. It also now carries ratings on bond issues.

INVESTMENT SECURITY MARKET.—This market is composed of a great many parts, each of which has an important relation to the whole. At

the head of the list are the strictly **underwriting firms** which sell almost entirely on a wholesale basis to the great body of investment bankers and dealers. In this class, J. P. Morgan & Co., and Kuhn, Loeb & Co., both of New York City, are the leaders. Next to them come a large number of investment banking houses and the bond departments of some metropolitan banks which carry on an underwriting and wholesaling business in addition to retailing direct to investors through their sales representatives. After that group in the list come the hundreds of **small security dealers** and bond departments of banks which retail only. All of these firms are in business for financial gain, and always stand ready to buy any securities which are found to meet their investment requirements and which they anticipate being able to sell to their clients at a price which allows a fair margin of profit. It is because of this fact that securities generally find their proper market level. Hundreds of dealers are constantly searching the markets for bargains while others are at the same time ready to recommend that their clients dispose of any securities that appear to be selling too high.

The market, as a whole, is thus always kept in action, and very few genuinely attractive investment opportunities are neglected for any length of time.

When a large issue of bonds or stock is to be sold, it is customary for the negotiators of the business to form an **underwriting syndicate** which may include anywhere from 2 to 20 prominent investment banking firms, or possibly more. The syndicate assumes the risk of being able to market the securities for an aggregate sum, which will show a profit over the price guaranteed to the issuing company, government, or municipality, as the case may be. The next step is the public offering at a definite price, fixed by the syndicate managers, in which a large number of dealers are invited to participate at a price allowing the syndicate members a small profit and low enough to permit the dealer to sell at the set price with a profit for himself. The amount of profit varies considerably. An average in many cases might be a gross profit of $35 per $1,000 bond, out of which the dealers are allowed to make a profit of $25 per $1,000. The syndicate agreement is frequently binding for a period of 60 days, and imposes a penalty upon any participant who offers the securities below the set price, prior to the dissolution of the syndicate. This agreement assures the maintenance of the original price during the period of distribution to the actual investors.

It will be seen that the announcement "All bonds of this issue have been sold" does not necessarily mean that they have been purchased by investors. A well managed syndicate makes every effort to accomplish thorough distribution and a strong market. Sometimes they are successful, and at other times, the termination of a syndicate will be the signal for heavy selling in the open market and consequent drop in price. At such times, syndicate members may suffer severe losses. It is difficult, at times, to judge the proper price at which a new issue will be well taken, and this fact points to the importance of inquiring about performance on past offerings of the sponsors for any security issue.

Investment securities have a strong tendency to seek their proper market levels so that the offer of an unusually high return should be an invitation for thorough examination. Following this should be noted the fact that any sound business situation tends to improve while a questionable situation tends in the other direction, because a company whose credit position permits it to borrow at 5% has more chance of success, all other things being equal, than one which is forced to pay 8% for its borrowed capital.

SECTION 29

BUSINESS STATISTICS

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SECTION 29

BUSINESS STATISTICS

PURPOSE OF BUSINESS STATISTICS.—Statistics are facts expressed numerically. Statistics are useful in a business to the extent that they enable the executives to control expenses, promote greater efficiency and augment profits. This section deals with the forms of statistics which successful executives have found helpful to themselves and their organizations. Consideration of these forms is important because comprehension of facts is affected quite as much by the method of presentation as by the accuracy of the data.

CLASSES OF STATISTICS USED WITHIN AN ORGANIZATION.—James H. Bliss, in "Financial and Operating Ratios in Management," classifies statistics used within business organizations into three general classes:

1. **Statistics on a business** for use in directing and controlling its operations and financial affairs.
2. **Statistics on the industry,** for developing competitive standards in that line of business to which earnings and expense ratios, turnovers, and other statistics of the individual company may be compared, thus indicating the status of the individual company in relation to its competitive standards.
3. **Statistics on the affairs of customers** to whom credit is extended, as the company is vitally interested in the affairs of its customers who, in the aggregate, represent its outlet for products.

STATISTICS ON THE INDUSTRY.—In addition to statistics on an individual business, provision should be made for accumulating all available statistics on the affairs of the particular industry. By comparing the showing of the individual company to these **standards or averages,** most valuable and useful information may be obtained. In most lines of business, quite usable statistics on the affairs of the industry may be developed from published financial statements and reports received from commercial agencies or other available data. Most business men are much interested in the results shown by competitors and naturally compare their own accomplishments with those of others. What they need is an analysis of the reasons why their showing may compare favorably or unfavorably with that of other businesses. The more complete the information available on the affairs of other concerns, the better and more useful the analysis which may be made. But even with incomplete reports, valuable information may be developed by comparisons with the statistics of one's own company.

A business has in its income statement a fair measure of the most important competitive standard—the **margin of gross earnings on sales.** This should be considered in connection with the spread in prices for materials and products existing from time to time. It is out of this gross margin that all costs, expenses, and profits must come. If the business has realized a satisfactory and com-

petitive margin of gross profit and still shows poorer final results than others, it has failed to meet competitive standards in some other phase of its affairs, either in overhead costs in production or distribution, in turnovers, or in efficiency in financial affairs. Any fragmentary information on competitive standards which may be available might be quite valuable when considered in connection with these conditions. The preparation and analysis of such statistics is best accomplished within the organization by those who are in intimate touch with the affairs of the business and can best judge its competitive conditions.

STATISTICS ON CUSTOMERS' AFFAIRS.—Statistics on the affairs of customers are useful, both in judging the lines of credit to be extended and in maintaining contact with the trend of **business conditions affecting the trade.** Any company is necessarily much interested in the affairs of its customers who in the aggregate represent its outlet for products. Business conditions and other circumstances affecting the affairs of customers are reflected in the sales and collections and mean better or poorer outlets for products.

Extending credit to a customer is lending capital to him on which to do business. The analysis of financial statements of customers affords the means of judging the financial position of the customer and gives an insight into the business and the efficiency of its management. In a sense the viewpoint of a credit man in an industrial organization is quite similar to that of the banker. The files on each important line of credit advanced might advantageously provide for carrying **continuous analysis of the statements** of the customer. In addition, where substantial lines of credit are advanced to several competing businesses, the accumulation and analysis of statistics on these as a group should afford valuable information to be kept in mind in judging any similar individual line of credit.

Statistical Classification and Tabulation

BASIS OF TABULATION.—Tabulation is based on **classification,** which is the basis of orderly thinking and consists in arranging statistical data into groups according to the character of the data. After classification, tabulation consists in arranging data thus classified in form of tables, which possess the advantages which classified data possess over unclassified data. These may be summarized as regularity, comparability, compactness, and legibility.

Certain conditions control method and arrangement in tabulation. One factor, frequently, is time, in which case the arrangement is **chronological.** Other arrangements are based on geographical location, magnitude, and the alphabet. **Arrangement** must always be considered as a function of purpose and should be varied when the purpose changes if a more effective presentation can be secured. Material should not be allowed to take tabular form without first being subjected to careful examination to determine the relationship of the different parts.

TECHNIQUE OF TABULATION.—The technique of tabular forms is a function of the information to be presented. It may be desirable to present one or more facts regarding a given class of data, and ordinarily the number of facts to be presented determines the construction of the table. The form to be adopted is the one which best brings out the relationships which it is desired to emphasize. In addition, certain other considerations of general character must be allowed for. One is the **physical limitation of the printed page.** An arrangement which crowds either dimension of the page should be avoided. Where

totals are to be shown, their position must be carefully considered. Until recently it has been customary to show these at the bottom of the page, but it has now become the frequent practice to show them at the top as in the table shown in Fig. 1. This places the totals in the most conspicuous position, which is their proper place if it is desired to emphasize them. Great care should be exercised in formulating the **titles of statistical tables.** While they should be brief, they should state clearly what the contents are. Improperly worded and arranged titles are a frequent cause of failure in presenting useful data.

Number of Real Estate Mortgages in Kentucky, by Years

Year	Number of Real Estate Mortgages in Kentucky		
	Total	Taxable	Non-Taxable
Total.....	.....	.....	.....
1921.....			
22.....			
23.....			
24.....			
.....			
.....			

FIG. 1. Table Showing Totals at Top

The **nature of the data** to be tabulated must be taken into consideration in determining the form of table to employ. In case of **historical data** time is a controlling consideration and must dominate the arrangement. Where data give a **cross-sectional view as at a given time,** the factor of time may be ignored except in the title. In preceding illustration time is a controlling factor. In Fig. 2, showing the range of prices of certain stocks on the New York Stock Exchange, time is not a controlling factor in determining tabular arrangement. Here alphabetical arrangement controls horizontally, while order of sales controls vertically. In a sense, time is a factor, since the "open" price occurs first and the "close" price last, but this is not true of the "high" and "low" prices.

Open, High, Low, and Closing Prices of Eight Stocks on the New York Stock Exchange on September 2, 1925

Name of Stock	Open	High	Low	Close
American Can.....	228	229½	218¼	218¼
Baldwin Locomotive.....	119	120¾	117¾	118⅝
General Motors.....	87⅞	88⅝	87⅝	87¾
Public Service of New Jersey.....	81⅛	81⅜	78⅜	78⅝
St. Louis-San Francisco Ry.....	100⅞	100⅞	98⅛	99½
Standard Oil of New Jersey.....	39¼	39½	38⅞	38⅞
U. S. Steel.....	119	119⅞	118¼	118¾
Wabash.....	42½	43¼	41¼	41¾

FIG. 2. Table Showing Arrangement in Which Time is not a Controlling Factor

Another type of data is that which expresses **variations at a single point in time.** This kind of data is usually formed into groups of equal width. It is illustrated in **Fig. 4.**

AVERAGES—THEIR FUNCTION.—To interpret large masses of data it is necessary to secure certain **brief summaries** which, while not presenting all the information which may be secured from the original data, do bring out the **fundamental tendencies** which underlie it and which a casual inspection of the data does not ordinarily make evident. The purpose of averages is to interpret the tendencies hidden under great masses of figures. In making this interpretation details must be neglected, because it is the essential purpose of averages to avoid details. The process of finding and using averages is a process of interpretation.

LIMITATION OF AVERAGES.—In employing averages as short-cuts to an understanding of statistical data, care must be used not to make a wrong interpretation. Purely mechanical construction of averages unaided by judgment and the process of elimination of material which serves to obscure real tendencies is apt to lead to erroneous results. Averages are **frequently fictitious,** in that they may not be representative of any actual existing thing. They are representative of types which do not necessarily have actually existing counterparts. Such generalized expressions necessarily possess limitations as to usefulness. Sometimes their employment indicates neglect or a willingness to forego a more searching inquiry. They must be used with judgment and caution. On the other hand, where detail may be neglected, averages oftentimes give an accurate picture of tendencies.

ARITHMETIC AVERAGES.—The arithmetic average is the average most widely used. It is described as being the **center of gravity of a statistical series.** To secure it all items in a given series must be considered. It is a mathematical concept and may have no actually existing counterpart. The average of two entirely different series may be the same. The average of 7, 6, 5, 3, 2, 1, is 4. The average of 1, 3, 8, is also 4. The arithmetic average ignores the character of the distribution within the series. It should be **used with great care** because it is of a highly abstract character. In the **absence of bias,** i.e., where the members of a series are determined by chance, the arithmetic mean approximates more nearly the true value as the number of members or items in the series is increased. Series of this type are infrequent in economics and business because data on wages, sales, purchases, and so on are not determined purely by chance.

The arithmetic average is secured by totaling the items in a series and dividing their sum by the number of items, as shown in Fig. 3.

The **simple arithmetic average,** however, is frequently unsatisfactory as a summary figure. If the group is not homogeneous, if the extremes are far apart and the distribution between the extremes uneven, the arithmetic average may not be identical with or even representative of any of the constituent parts of the group. The average may fall at a point that does not correspond exactly with any items in the group. A few items at either extreme of a non-homogeneous group that covers a wide range may exercise a distorting influence upon the arithmetic average, and under some circumstances the arithmetic average may fail to show changes within a large group.

As an example, the average wage for the employees of a factory, over a period of time, may remain stationary while conditions undergo a material change. A small number of highly paid employees may receive an increase in wages while the wages of a larger number of less highly paid men are reduced, the changes just balancing themselves in the average. The average wage may be lowered in another instance merely because of the employment of a larger number of low-paid workmen, without any change in the rates of remuneration

Prices of Suits, Number of Each Sold in a Given Period, and Products of Prices and Numbers

Prices Suits	Number of Each Suit Sold	Products of Prices and Numbers
Total	422	$11,993
$15.00	47	$ 705
16.50	36	594
18.00	53	954
22.50	80	1,800
30.00	60	1,800
33.00	30	990
36.00	25	900
45.00	60	2,700
50.00	31	1,550

Average price per suit = $11,993 ÷ 422 = $28.42

FIG. 3. Table Showing Method of Calculating Arithmetic Average

for any class of labor. Consequently, the average wage is a worthless figure whenever the group for which it is computed includes different classes of labor with varying rates of remuneration; it throws light neither upon labor cost nor upon the welfare of the laborers. Numerous other averages must be similarly qualified. It is in such cases as the preceding that a classification of the data is especially essential if comparisons are to be made.

The importance of items in a series is sometimes affected by the frequency with which they occur. When each item occurs but once, the **question of weighting** does not arise, because due allowance is made for each occurrence when the average is found according to the rule stated above. When the

Wage Groups, Frequencies in Each Group, and Data for Determination of the Arithmetic Average

(1) Wage Groups	(2) Frequencies in Each Wage Group	(3) Products of Frequencies and Middle Terms of Each Group
Total	359	$2,512.50
$ 2.00 to $ 2.99	12	$ 30.00
3.00 " 3.99	15	52.50
4.00 " 4.99	30	135.00
5.00 " 5.99	70	385.00
6.00 " 6.99	65	422.50
7.00 " 7.99	58	435.00
8.00 " 8.99	41	348.50
9.00 " 9.99	30	285.00
10.00 " 10.99	22	231.00
11.00 " 11.99	12	138.00
12.00 " 12.99	4	50.00

FIG. 4. Table Showing Series Consisting of Frequency Groups

various items of a series have various frequencies, it is necessary to take thes frequencies into account in securing a true or weighted average.

FREQUENCY GROUPS.—In the case of statistical series consisting o frequency groups the number of items falling within the limits of each grou is given but the arrangement within the group is not known. It is, therefor necessary to assume an even distribution within the group and to multipl the frequencies by the middle terms of each group. The procedure is illustrate in Fig. 4. The arithmetic mean is secured by dividing the sum of column (3 by the sum of column (2), the group frequencies. In this case we have

$$A.\ M. = \$2{,}512.50 \div 359$$
$$= \$7.00$$

THE COMMON DENOMINATOR.—The common denominator is a form of weighted average designed to indicate the general movement of sever classes of units without reference to an individual unit. The basis of conversio to be used in arriving at any common denominator varies in different industrie It may be selling price, labor or material cost, or a combination of several them. An example of the use of a common denominator is presented in th case of a corporation producing several classes of storage batteries. For st tistical purposes the Edison Storage Battery Co. sometimes converts all typ of batteries sold or produced to a unit basis of one battery known as an "A equivalent." While the following figures are not the ones used, they serve t indicate the principle as shown in Fig. 5:

The A-4 = 1 unit
The B-4 = 2 units
The A-6 = 1.5 units

Storage Batteries Production

Types of Cells (1)	Number of Cells Produced (2)	Factor Multiplier or Unitary Value (3)	Number of Units Produced (4)
A-4	1,000	1	1,000
B-4	1,000	2	2,000
A-6	1,000	1.5	1,500
			4,500 A-4 equivalents

FIG. 5. Table Illustrating Use of Common Denominator

Thus, the production was 4,500 A-4 equivalents where the A-4 is the comm denominator.

Another use of a common denominator is exemplified, in the case of railroa by the unit known as "dollars per train mile," which is obtained by dividi the total dollars received or expended for operation by the total number miles run by the trains during a given period.

BUSINESS STATISTICS ORDINARILY AVAILABLE.—Business statist may be grouped into two general classes:

1. External statistics, which indicate the general trend of business a market conditions.
2. Internal statistics, which are concerned with the operations of an in vidual business enterprise.

External Statistics.—"Examples of this class are the statistics of manufactures, agriculture, population, etc., collected by the United States Bureau of the Census; railroad or other public utility statistics published by the Interstate Commerce Commission and by state commissions; banking and financial statistics published in the financial journals; price and production statistics published in trade papers, and the reports of trade associations." ("Business Statistics," by Melvin T. Copeland.)

Internal Statistics.—Internal statistics comprise those obtained from the accounts and records of an individual business and may cover any details of the business including sales and advertising data, factory costs and expenses, etc. "Such reports and records are used in business establishments of all sorts, both large and small. In fact successful business administration depends to a large degree upon these reports and records, which are utilized for checking up current operations and determining tendencies. They provide a basis for the formulation of plans and policies. If all of the details of the business are to be followed accurately and if exact standards are to be established for comparison, such records are indispensable.

"In some large manufacturing companies an elaborate statistical system is maintained, whereby the various department heads obtain statistical reports for their own guidance and summaries of these departmental reports are prepared at regular intervals for the chief executive. By this means statistics are gathered

Monthly Record of Sales by Departments

Months	Dept. 1	Dept. 2	Dept. 3	Dept. 4	Dept. 5	Total
January	$1,327.76	$2,976.47	$4,567.34	$3,091.23	$5,684.92	
February	1,094.25	3,462.45	4,809.67	2,890.67	5,892.43	
March	1,213.06	3,126.87	5,003.29	2,901.56	6,045.42	
April	1,164.36	3,879.65	4,782.54	2,875.69	5,587.67	
May	1,086.79	2,580.56	4,347.83	2,784.35	5,460.57	
June	987.57	2,784.66	4,476.21	2,783.52	5,472.31	
July	975.64	2,564.43	4,357.81	2,569.58	5,216.49	
August	976.56	2,376.65	4,235.68	2,467.92	5,127.65	
September	1,234.43	3,107.52	4,460.34	2,984.62	5,436.53	
October	1,321.26	3,245.63	4,532.25	3,012.56	5,542.32	
November	1,109.60	2,895.64	4,463.38	2,982.29	5,463.38	
December	1,437.87	3,256.76	4,987.56	3,248.90	5,873.24	
Total						

FIG. 6. Example of Statistical Record

Sales and Returned Goods by Departments

Year ending.....

Dept.	Sales	Returned Goods	Net Sales	% of Sales Returned
1	$ 25,431.76	$ 768.63		
2	48,976.53	876.52		
3	76,432.56	1,097.57		
4	98,742.27	1,210.78		
5	67,834.62	895.68		
6	110,532.65	873.45		
Total				

FIG. 7. Example of Statistical Record

from all corners of the organization, covering all of its activities. These current reports are supplemented by reports on special tests or investigations. The use of statistics is not confined, however, to large companies; many small manufacturing establishments and numerous retail stores of ordinary volume of business utilize statistical records to advantage." ("Business Statistics," by Melvin T. Copeland.)

FORMS OF STATISTICAL RECORD.—Simple forms of statistical records are shown in Figs. 6–9.

Individual Daily Sales Sheet

Section 13, Dry Goods Date, May 11, 19—

Clerk's Number	Gross Sales	Returned Goods	Net Sales	Checks	Average Net Sales Per Check
121	$312.67			121	
122	413.36	$ 6.75		136	
123	215.23			97	
124	318.56	11.23		118	
125	456.78			124	
126	235.67	8.79		79	
127	102.46	1.78		81	
128	189.67	2.34		104	
129	213.53	3.21		115	
130	346.76	9.56		121	
Total					

FIG. 8. Example of Statistical Record

Comparison of Sales by Corresponding Months

Salesman, John Doe

Month	Sales Last Year	Sales This Year	Increase	% of Increase	Decrease	% of Decrease
January	$356.76	$430.12	$73.36	20.6		
February	456.87	515.60				
March	345.65	356.45				
April	450.10	390.50				
May	287.65	324.36				
June	231.90	245.87				
July	450.65	467.54				
August	346.75	356.52				
September	436.47	420.75				
October	567.35	580.67				
November	478.56	487.64				
December	564.32	545.53				

FIG. 9. Example of Statistical Record

The Business Cycle

DEFINITION.—A cycle is a round of operations or events—a series which returns upon itself. The term "business cycle" is based on the premise that there is a sequence in business events which repeats itself at certain intervals

of time. The steps in this sequence are variously defined. Jordan[1] defines them as prosperity, liquidation, depression, recovery; Copeland[2] defines them as prosperity, crisis and depression; the Harvard Economic Service calls them depression, recovery, business prosperity, financial strain and industrial crisis. For discussion of the economic theories of business cycles, see Section 1 on the Fundamentals of Business Economics.

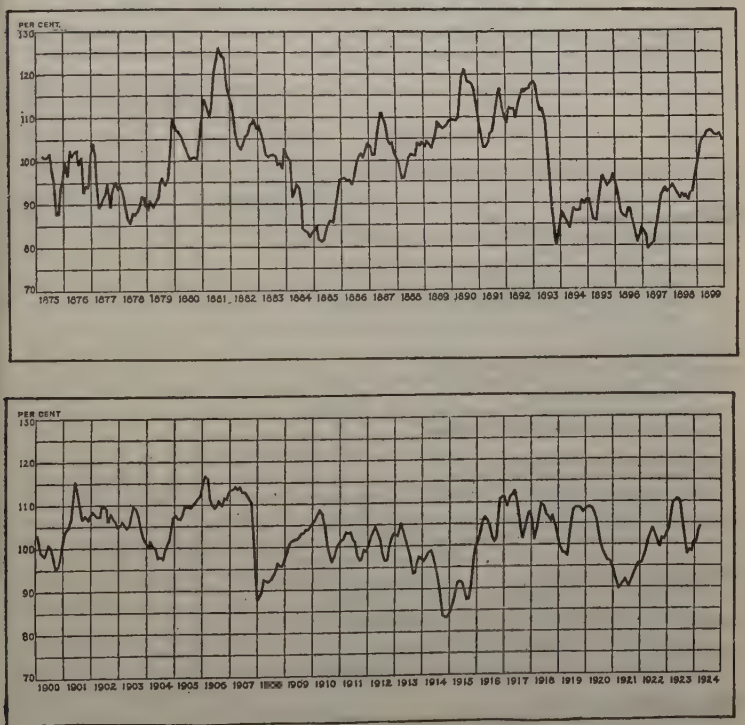


FIG. 10. Fluctuations in Business for 25 Years—the line showing bank clearings corrected for price variations

CAUSES UNDERLYING THE BUSINESS CYCLE.—Herbert Hoover in a statement before the President's conference on unemployment in Washington, in September 1921, said:

"Broadly, the business cycle is a constant recurrence of irregularly separate booms and slumps. The slumps are in the main due to the wastes, extravagance, speculation, inflation, over-expansion and inefficiency in production

[1] "Business Forecasting," by David F. Jordan.
[2] "Business Statistics," by Melvin T. Copeland.

developed during the booms. The strategic point of attack is the reduction of these evils, mainly through the provision for such **current economic information** as will show the signs of danger, and its more general understanding and use by producers, distributors and banks, inducing more constructive and safer policies."

The "booms and slumps" referred to by Mr. Hoover are portrayed in the chart in Fig. 10, taken from the monthly review of the Federal Reserve Bank of New York. Bank clearings are used as the basis for the charts.

The **Harvard Economic Service** presents its conception of the business cycle, with specific reference to the period from 1903 to 1914, as shown in Fig. 11.

Phase	Nov.–Dec. 1903 to Nov.–Dec. 1907	Jan.–Feb. 1908 to July–Aug. 1910	Sept.–Oct. 1910 to Nov.–Dec. 1913
	Months	Months	Months
Phase 1: Depression (a) Security prices begin to advance; speculative activity increases. (b) Commodity prices continue to decline; business activity is sluggish. (c) Rates on commercial paper decline; bank reserves increase.	10	6	10
Phase 2: Recovery (a) Speculative activity is marked. (b) Business activity recovers; commodity prices begin to advance. (c) Rates on commercial paper begin to advance late in this phase of the cycle.	18	14	12
Phase 3: Business Prosperity (a) Speculative activity is checked. (b) Business activity and commodity prices continue to increase. (c) Rates on commercial paper continue to advance while bank reserves decrease.	10	4	8
Phase 4: Financial Strain (a) Security prices decline sharply; speculative activity is depressed. (b) The upward tendency of business activity and commodity prices is checked. (c) Rates on commercial paper remain high or stiffen and the banking situation is strained.	10	4	4
Phase 5: Industrial Crisis (a) Prices of securities reach bottom and speculative markets are panicky. (b) Commodities are liquidated, prices fall, and business activity slumps badly. (c) Rates on commercial paper reach maximum and bank reserves reach minimum. The crisis breaks.	2	4	6
Length of complete cycle	50	32	40

Fig. 11. Harvard Economic Service Conception of Business Cycle Phases

STATISTICS AS BAROMETERS OF BUSINESS.—Many business men now endeavor to secure themselves against the effects of depression and panic by the use of statistical information which will aid in forecasting the probable

length of each phase of the business cycle and in making preparations to meet changing conditions. Such statistics are looked upon as **business barometers,** their purpose being to indicate as reliably as possible the conditions which are likely to be encountered next in the business world. Statistics concerning activities which respond most readily to changing economic conditions are most effective as barometers, some of the most useful being as follows:

- Business failures
- Bank clearings
- Commodity prices
- Imports and exports
- Corporation earnings
- Crop conditions
- Wages of labor
- Idle freight cars
- Gold production
- Iron and steel production
- New buildings

Index Numbers

PURPOSE.—Index numbers, in the form usually of averages, are employed to show **trends in prices** or in other movements which can be quantitatively expressed by means of statistical data. Usually these averages are averages of relative numbers, although it is not uncommon to employ sums of actual prices as index numbers.

NATURE OF COMMONLY QUOTED INDEX NUMBERS.—Melvin T. Copeland, in "Business Statistics," makes the following observations:

"Few of the widely-used index numbers are made to serve one special purpose. On the contrary, most of them are **'general-purpose' series,** designed with no aim more definite than that of measuring changes in the price level. Once published they are used for many ends—to show the depreciation of gold, the rise in the cost of living, the alternations of business prosperity and depression, and the allowance to be made for changed prices in comparing estimates of national wealth or private income at different times.

"The **reliability of an index number** obviously depends upon the judgment and the accuracy with which the original price quotations were collected. This **field work** is not only fundamental, it is also laborious, expensive, and perplexing beyond any other part of the whole investigation. Those who deal with data already published are prone to regard all this preliminary work as a clerical compilation requiring much industry but little skill. To judge from the literature about index numbers one would think that the difficult and important problems concern methods of weighting and averaging. But those who are practically concerned with the whole process of making an index number from start to finish, rate this office work lightly in comparison with the field work of getting the original data.

"Wholesale prices of articles like pig iron, cotton, or beef, are commonly spoken of as if there were only one unambiguous price for any one thing on a given day. However, this price may vary from one day to another. In fact, there are **many different prices** for every great staple on every day it is dealt in, and most of these differences are of the sort that tend to maintain themselves even when markets are highly organized and competition is keen. It is still more difficult to secure satisfactory statistics concerning the **relative importance of the various commodities** quoted. What is wanted is an accurate census of the quantities of the important staples, at least, that are annually produced, exchanged or consumed. To take such a census is altogether beyond the power of private investigators or even of the Government bureaus now engaged in making index numbers.

"American index numbers are made from market prices, usually obtained

directly from manufacturers, selling agents or wholesale merchants, from record of produce exchanges, or from trade journals and newspapers which make specialty of market reporting. Several important **foreign index numbers** ar made from 'import and export values,' that is from average prices of importan articles officially declared.

"A **food index number** is likely at any time to give a wrong impression re garding the shifting of prices in general, and is especially treacherous as business barometer. Nor can such an index when made from wholesale price be trusted to show changes in the 'cost of living'; for living expenses are mad up of retail prices, and fluctuations in retail prices do not follow closely thos in the wholesale markets.

"If **rational weighting** is worth striving after, then by what criterion sha the relative importance of the different commodities be judged? That depend upon the object of the investigation. If, for example, the aim be to measur changes in the cost of living, and the data be retail quotations of consumer commodities, then the proportionate expenditures upon the different article as represented by collections of family budgets should be given appropriat weights. If the aim be to study changes in the incomes of farmers, then th data should be 'farm prices,' and the list of commodities should be limited t farm products, and the weights should be proportionate to the monetary receipt from the several products. If the aim be to construct a business barometer the data should be prices from the most representative wholesale markets, an the list should be confined to commodities whose prices are most sensitive t changes in business prospects."

STEPS IN CONSTRUCTION OF INDEX NUMBERS.—Professor W. C Mitchell enumerates the steps involved in the construction of index number as follows:

"(1) Defining the purpose for which the final results are to be used; (2 deciding the numbers and kinds of commodities to be included; (3) determinin whether these commodities shall be treated alike or whether they shall b weighted according to their relative importance; (4) collecting the actual price of the commodities chosen, and, in case a weighted series is to be made, collectin also data regarding their relative importance; (5) deciding whether to measur the average variations of prices or the variations of a sum of actual prices; (6 in case average variations are to be measured, choosing the base upon whic relative prices shall be computed; and (7) settling upon the form of average t be struck.

"At each one of these successive steps choice must be made among alternative that range in number from two to thousands. The possible combinations amon the alternatives chosen are indefinitely numerous. Hence there is no assignab limit to the possible varieties of index numbers, and in practice no two of th known series are exactly alike in construction. To canvass even the importan variations of method actually in use is not a simple task."

Use great care in the selection and use of data for purposes of index numbe making. There is never a single price for a commodity, because prices var as between wholesale and retail, locality, and so on. The data used must b truly representative. If selection is necessary because of the impossibility including all data, use care to see that it is representative. Regarding th choice of commodities and the importance assigned to each, Professor Mitche says:

"As for the small series made from the prices of foods alone or from the price of any single group of commodities, it is clear that, however good for speci uses they may be, they are untrustworthy as general-purpose index number

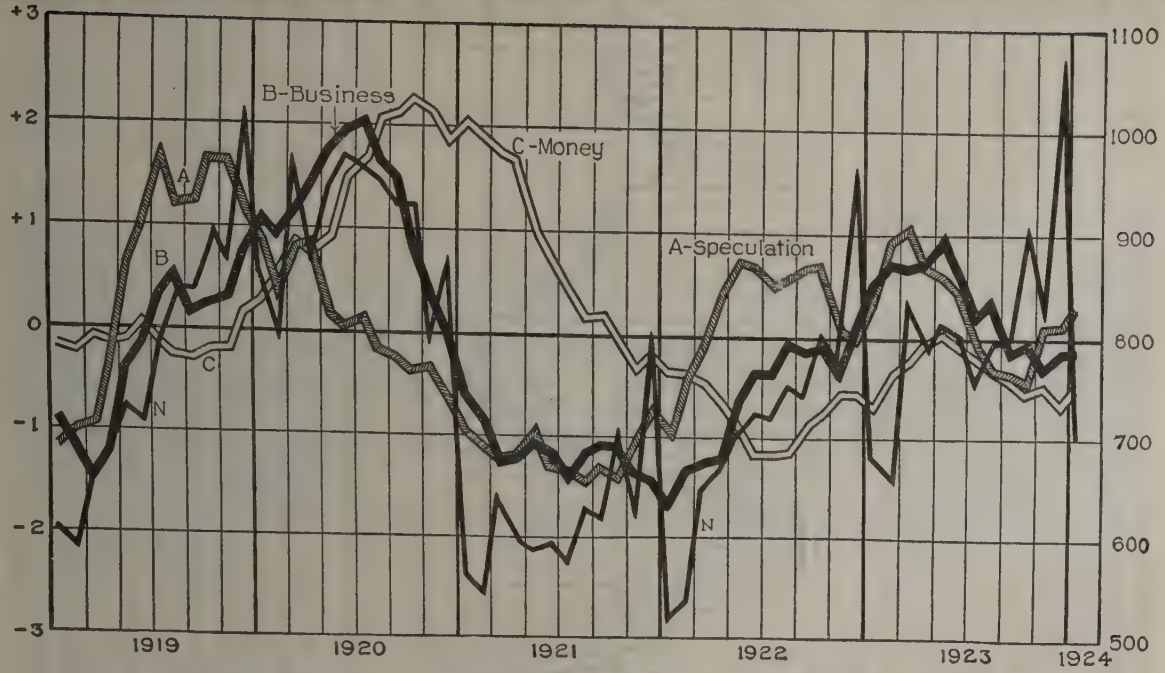


FIG. 12. Sales of Company N (Actual Data in Hundreds of Dollars) Compared with the Harvard Index Curves

"The second conclusion . . . . is that large index numbers are more trustworthy for general purposes than small ones, not only in so far as they include more groups of related prices, but also in so far as they contain more numerous samples from each group. What is characteristic in the behavior of the prices of farm crops, of mineral products, of manufactured wares, of consumers' goods, etc.—what is characteristic in the behavior of any group of prices—is more likely to be brought out and to exercise its due effects upon the final results when the group is represented by 10 or 20 sets of quotations than when it is represented by only one or two sets. The basis of this contention is simple: In every group that has been studied there are certain commodities whose prices seldom behave in the typical way, and no commodities whose prices can be trusted always to behave typically. Consequently, no care to include commodities belonging to all the important groups can guarantee accurate results, unless care is also taken to get numerous representatives of each group."

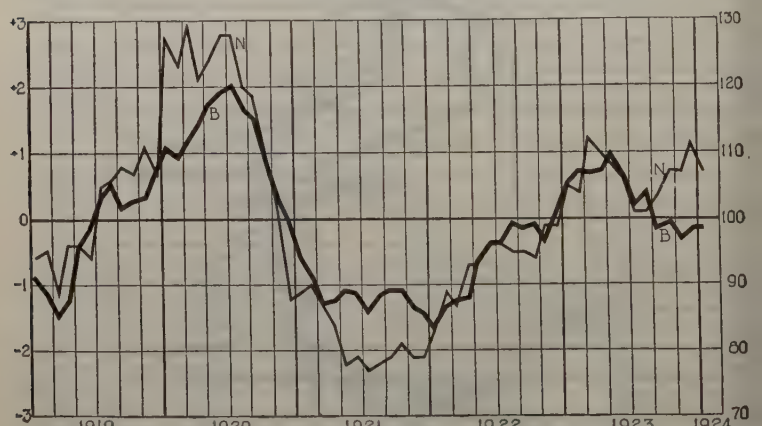


FIG. 13. Sales of Company N (Per Cent Relatives to the 1919–21 Average as Base, Corrected for Seasonal Variation), Compared with the Harvard B Curve

USE OF INDEX NUMBERS OF GENERAL BUSINESS FOR COMPARISON WITH INDIVIDUAL BUSINESS.—Of particular interest to the business man is another type of index number, constructed by **combining into a single index several series** reflecting general business activity. (For a more detailed discussion of such index numbers, see the section on the Fundamentals of Business Economics.) A comparison of such general business index numbers with the records of an individual business house will often yield valuable information to the business man. The following extract from the Harvard Economic Service Bulletin indicates the procedure:

"In making a comparison between the fluctuations in a particular business concern and the Index of General Business [index of the Harvard Service], it is desirable to examine **several phases of the individual business,** as reflected by different series of statistical data. For instance, separate analyses may be made of production, stocks, shipments, orders entered, sales billed, prices of

FIG. 14. Walworth Manufacturing Company Sales Compared with Harvard Curve B (Business), 1903–1914

materials, pay-roll, gross income, net earnings. In fact, any statistical series which pertains to the business and for which a continuous monthly record extending over several years is available may yield interesting and useful results upon analysis.

"The fluctuations in some of these special series, however, are likely to be much more complex than in others. One series can generally be selected as giving the best single picture of the progress and condition of a particular business. It is understood, of course, that this most representative series may consist of one record of figures in one business and be based upon an entirely different phase of the records of another business: one business may find sales billed best, and another may select orders entered."

To illustrate this sales billed was selected as representative of the business organization. The chief reasons for this selection were that sales billed seem to be the figures most commonly available on a monthly basis for those who wish to make comparative studies; and, in such individual studies sales billed usually gave better results than the other series examined. The chart reproduced in Fig. 12 contains a line marked "N." This line represents actual sales in dollars. A refinement of the sales line may be made by **correcting it for seasonal variation.** A formula for doing this has been worked out in detail by the Harvard Economic Service. The sales for Company "N" as adjusted for seasonal variation are reproduced in Fig. 13 for comparison.

The Harvard Economic Service further states: "A number of subscribers have already determined the relation of their business to the economic cycle (curve B), and have found the results exceedingly valuable. The chart [shown in Fig. 14] presents a comparison of the monthly sales of the Walworth Manufacturing Co. with the Harvard curve B for the period 1903–14. It will be seen that there is a very close correspondence between the movements of the two curves throughout the entire period. Moreover this relationship has continued to obtain since the close of the war. A large number of subscribers undoubtedly would discover through investigation that the activity of their business corresponds approximately with the movements of the Harvard B line, although there are some who would find that their business precedes or lags behind curve B by varying intervals."

Graphic Presentation—Forms and Diagrams

ADVANTAGES OF GRAPHIC PRESENTATION OVER TABULATION.—Charts depend upon their **appeal to the eye** for their effectiveness. Stephen Gilman, in "Graphic Charts for the Business Man," says:

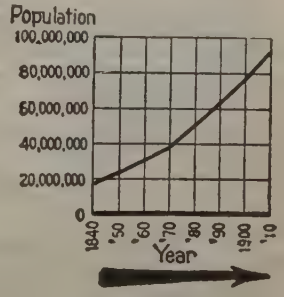
"The remarkable success of the moving picture industry has one important lesson for the American business man. It has convinced him as nothing else could, that the most effective appeal to the public is through the eye—not by print, but by pictures. This same peculiarity of human nature has been taken advantage of by the skilled advertising man. The magazine advertisement without the illustration is almost so rare as to excite comment. The reason is obvious. A picture is universal in its appeal. It can be understood by the American or the Chinaman, by the Spaniard or the Hindoo without difficulty. Printed words, sentences, and paragraphs, on the other hand, are distinctly limited in their appeal. The reader must get the author's meaning through a secondary medium, and not direct, as in the case of a picture. The engineering profession has for many years recognized this trick of human psychology. Engineers use pictures to convey engineering facts. The kind of pictures which they use are termed 'graphs' or 'graphic' charts."

Graphs are merely **pictures of figures.** Their function is to present to the mind in a definite, clear, and comprehensive manner, the relation of important factors to one another.

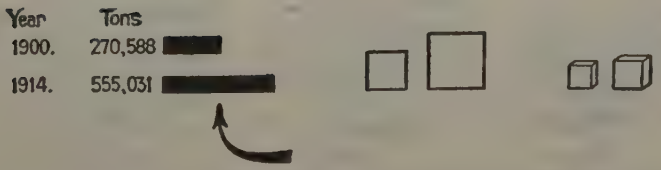
Long rows of figures must be thoroughly studied in order to convert them mentally into quantities which may be compared as to size. This is a tedious task which many executives have learned to dread. The reason is a simple one—a row of figures does not tell a story of itself. A somewhat involved mental process is required to grasp fully the real facts. The use of graphic charts or "curves," as they are sometimes called, permits more rapid and accurate interpretation of data. Many pages of valuable figures might be laboriously prepared; yet they have little value unless studied as an aid to administrative guidance. A simple chart may convey information more clearly than the most elaborately written report.

STANDARDS FOR GRAPHIC PRESENTATION.—The need for uniform standard for graphic presentation has been recognized by a number of organizations. Invitations were extended by the American Society of Mechanical Engineers to a number of associations of national scope and their efforts to standardize procedure have resulted in the appointment of a **Joint Committee on Standards for Graphic Presentation** which has issued a report containing the following suggestions as representing the more generally applicable principles of elementary graphic presentation:

1. The general arrangement of a diagram should proceed from left to right.

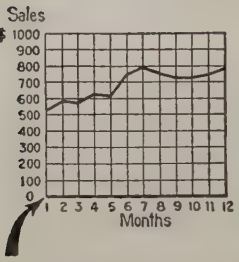


(1)



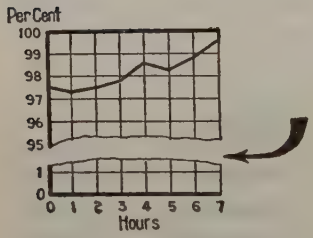
(2)

2. Where possible represent quantities by linear magnitudes, as areas or volumes are more likely to be misinterpreted.



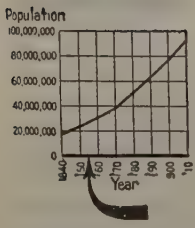
(3)

3. For a curve the vertical scale, whenever practicable, should be so selected that the zero line will appear on the diagram.

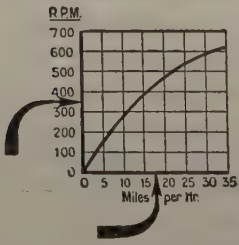


(4)

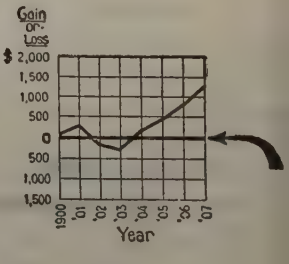
4. If the zero line of the vertical scale will not normally appear on the curve diagram, the zero line should be shown by the use of a horizontal break in the diagram.



(5a)

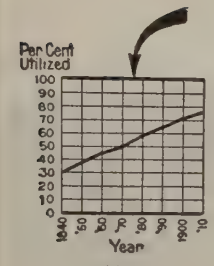


(5b)

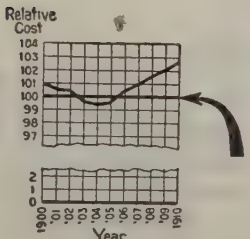


(5c)

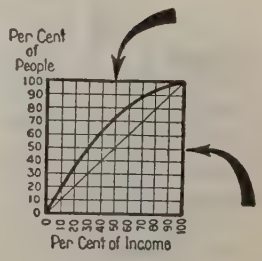
5. The zero lines of the scales for a curve should be sharply distinguished from the other coördinate lines.



(6a)

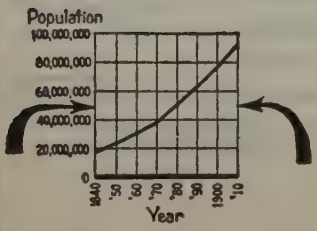


(6b)



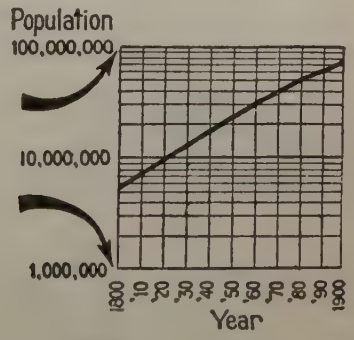
(6c)

6. For curves having a scale representing percentages, it is usually desirable to emphasize in some distinctive way the 100 per cent line or other line used as a basis of comparison.



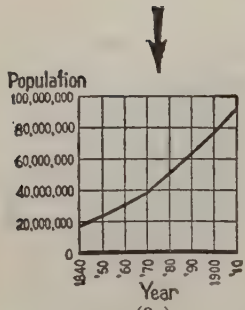
(7)

7. When the scale of a diagram refers to dates, and the period represented is not a complete unit, it is better not to emphasize the first and last ordinates since such a diagram does not represent the beginning or end of time.

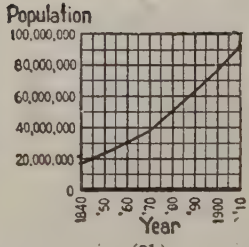


(8)

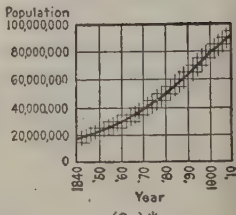
8. When curves are drawn on logarithmic coördinates, the limiting lines of the diagram should each be at some power of ten on the logarithmic scales.



(9a)



(9b)

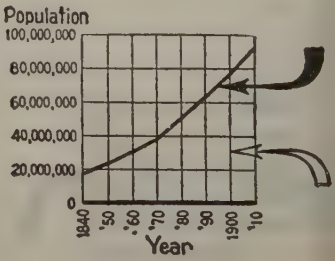


(9c)*

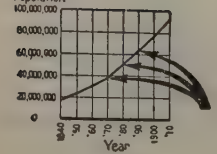
9. It is advisable not to show any more coördinate lines than necessary to guide the eye in reading the diagram.

*Figure 9c is not in the original report, but is offered here as another means of making the field clear by showing detail coördinates only in the zone of the curve.

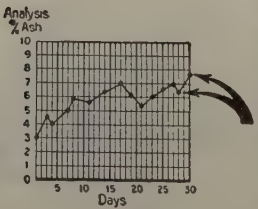
10. The curve lines of a diagram should be sharply distinguished from the ruling.



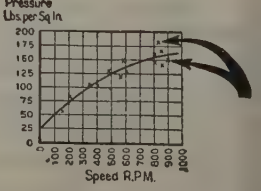
(10)



(11a)



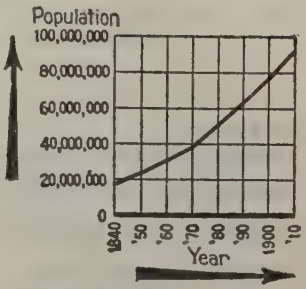
(11b)



(11c)

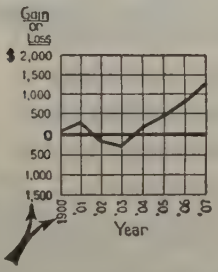
11. In curves representing a series of observations, it is advisable, whenever possible, to indicate clearly on the diagram all the points representing the separate observations.

12. The horizontal scale for curves should usually read from left to right and the vertical scale from bottom to top.

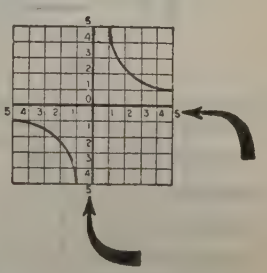


(12)

(13a)

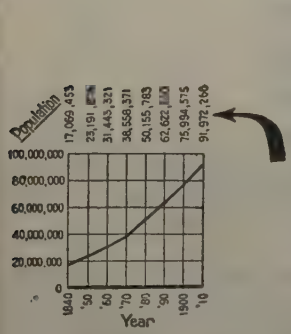


(13b)

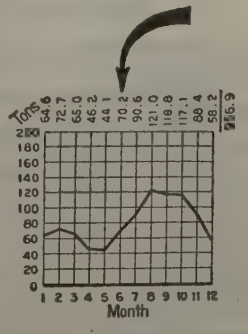


(13c)

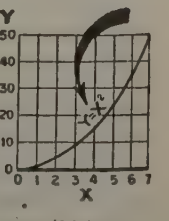
13. Figures for the scales of a diagram should be placed at the left and at the bottom or along the respective axes.



(14a)

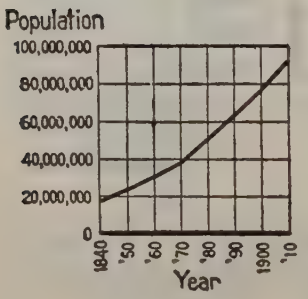


(14b)



(14c)

14. It is often desirable to include in the diagram the numerical data or formulæ represented.

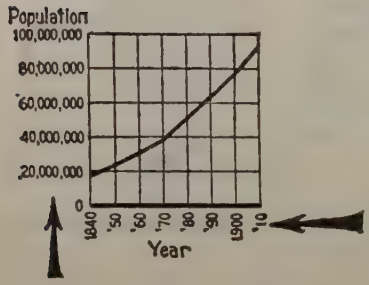


(15b)

Year	Population
1840	17,069,453
1850	23,191 876
1860	31,443,321
1870	38,558,371
1880	50,155,783
1890	62,622,250
1900	75,994,575
1910	91,972,266

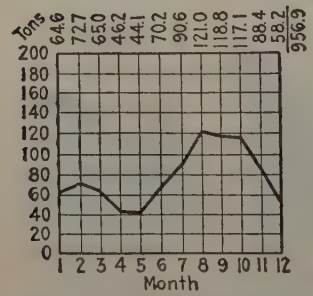
(15a)

15. If numerical data are not included in the diagram it is desirable to give the data in tabular form accompanying the diagram.



(16)

16. All lettering and all figures on a diagram should be placed so as to be easily read from the base as the bottom, or from the right-hand edge of the diagram as the bottom.



Aluminum Castings Output of Plant No. 2, by Months, 19—. Output is given in short tons. Sales of Scrap Aluminum are not included. (17)

17. The title of a diagram should be made as clear and complete as possible. Sub-titles or descriptions should be added if necessary to insure clearness.

FORMS OF GRAPHIC PRESENTATION.—There are **four** main forms of graphic presentation, which have been found most valuable in business. These are—

Bar charts	Map charts
Curve or line charts	Flow charts

BAR CHARTS.—The **great advantage** of the bar chart lies in the fact that the average individual is able to grasp and differentiate the comparative values of the various bars, or segments of bars, more accurately than is possible in the pictorial or pie chart. At the same time the vividness of impression conveyed by the bar chart is a major point in its favor. It is becoming **increasingly popular** in semi-technical and trade journals. The fact that a wide variety of

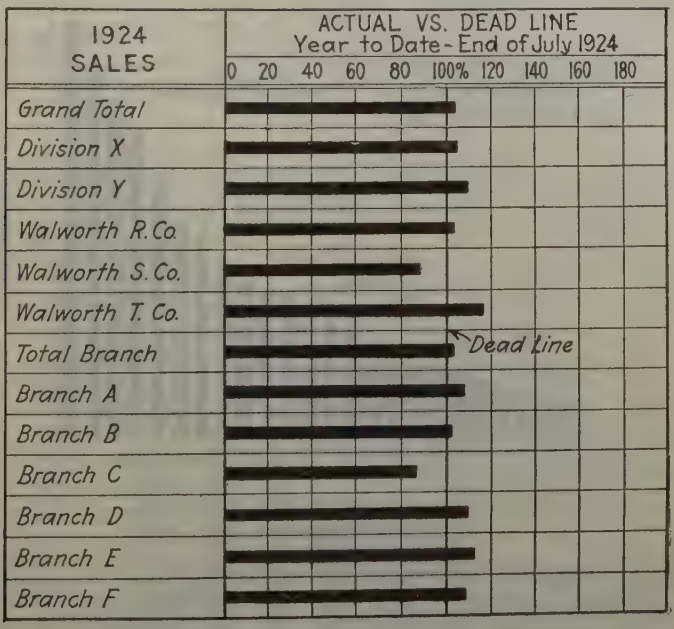


FIG. 15. Performance Comparison Against Forecast Sales

statistical comparisons can be made clear with this type of chart has led to its adoption in place of better methods. While there are some uses which absolutely require the bar chart form of presentation, it does not follow that it is the best for all purposes, and those using graphic forms should carefully distinguish the class of statistics to be presented, and then apply the proper form of graph, rather than attempt to put all statistics in bar form.

Fundamentally, bar charts are of two types—(1) **the simple bar** and (2) **the component bar.** The former is a single bar which represents a single figure. The latter is also a single bar representing a single figure but it is divided

into parts. The single figures represented by the several parts are components of the total figure which the bar as a whole represents. The component bar, therefore, may be said to represent a series of figures. The various forms of bar charts presented here are combinations or adaptations of these two elements. Primarily the principal forms of the bar chart may be grouped into **three broad classes**—(1) series of simple bars, (2) series of component bars, and (3) combination of two or more series of simple or component bars.

Series of Simple Bars.—In this case two or more simple bars representing related data are presented so that they may be readily compared. The bars may be extended horizontally or vertically (Figs. 15 and 16). This is a very simple and effective device for portraying **comparisons of single figures** whether

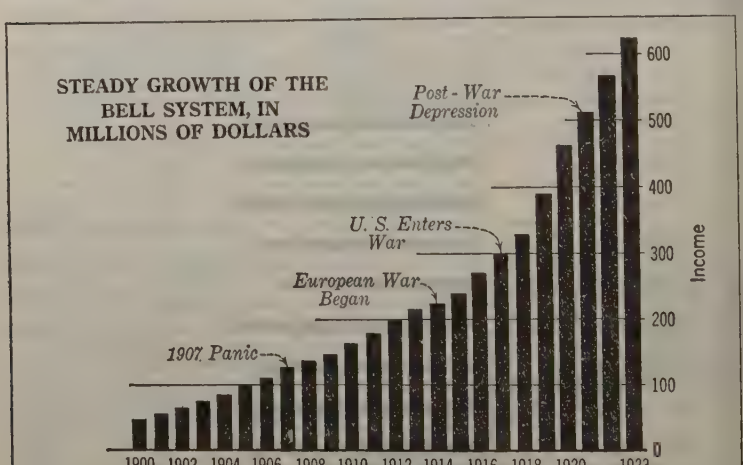


Fig. 16. Series of Simple Vertical Bars
(Bell Telephone Securities Co.)

personnel, financial, or operations. The different figures are represented by the lengths of the bars, which are projected from a common base. They may be used to represent graphically a great variety of data such as the number of employes, labor turnover, average rates of pay, expenses of different departments of the company, the purchasing, production, and selling facts of subsidiary companies, and so forth.

Series of Component Bars.—This form of graph consists of two or more component bars systematically associated. It is sometimes called a component bar chart. Each bar represents a series of figures and the group of bars two or more series of figures. There are **two general classes** of this form of graph, one in which all the bars are of equal length and the other in which the bars vary in length. The first is illustrated by Fig. 17 which is designed to show the total expenses of three railroad companies for August 1924, broken up into their component parts, and expressed in the form of distributive percen

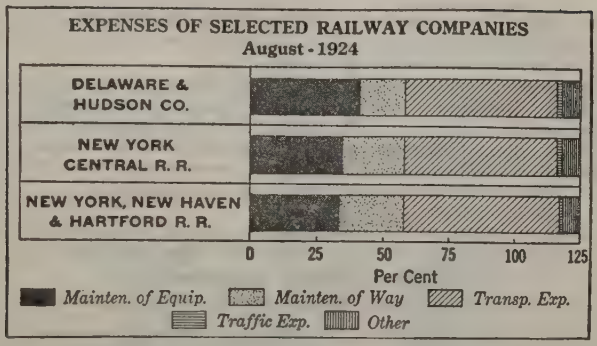


FIG. 17. Series of Component Bars—Bars of Equal Length

ages. It is sometimes referred to as the 100% compound bar-chart. Its most extensive use is in presenting data in the form of percentages. It may, however, be used to present absolute numbers as in the case of the distribution of workmen's time to different types of work, the distribution of a dollar of revenue,

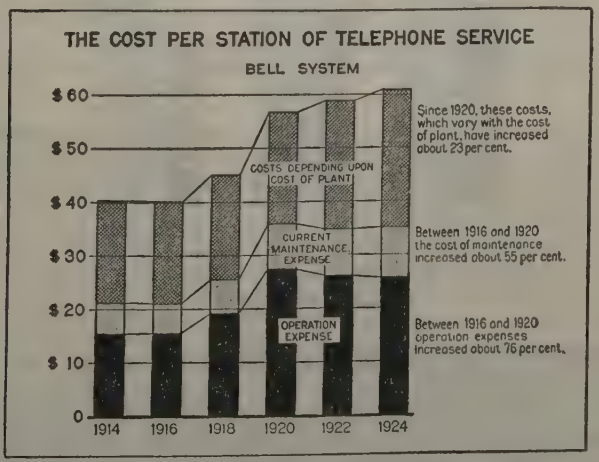


FIG. 18. Series of Component Bars—Bars of Unequal Length
(The American Telephone & Telegraph Co.)

or any other cases where the total figures in the several series are equal. The second form is typified by Fig. 18. In this case the bars, which represent absolute numbers of varying magnitude, are unequal in length. This form of

graph may be used to compare unequal absolute numbers and to break them up into their component parts, such as labor losses of the departments by causes or departmental expenses by classes.

The component bar-graph, however, is not effective for practical use. It affords ready comparison of only the series of parts which are adjacent to the base of the graph. The rest evidently cannot be well compared because they do not have a common starting point. Sometimes lines are drawn connecting the boundaries of the component parts of the several bars, as in Fig. 18; this improves the graph but does not overcome the disadvantage.

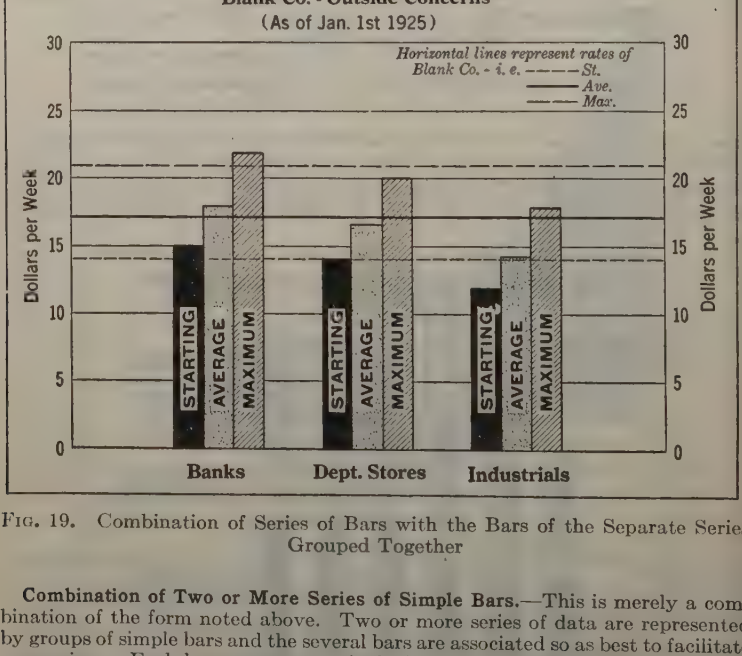


FIG. 19. Combination of Series of Bars with the Bars of the Separate Series Grouped Together

Combination of Two or More Series of Simple Bars.—This is merely a combination of the form noted above. Two or more series of data are represented by groups of simple bars and the several bars are associated so as best to facilitate comparison. Each bar represents a single figure and the different series of data are identified by distinctive markings. This form is sometimes called the multiple bar-graph. In associating the several bars, those representing each series may be grouped together as in Fig. 19, or the bars of each series which are to be compared may be grouped together as in Fig. 20. The particular method to follow in any given case will be determined on the basis of the facts of the particular situation. If the aim is primarily to compare the corresponding bars in the several series, the arrangement of Fig. 20 should be used. If the principal comparison is between the several bars of the same series the arrangement of Fig. 19 will be preferable.

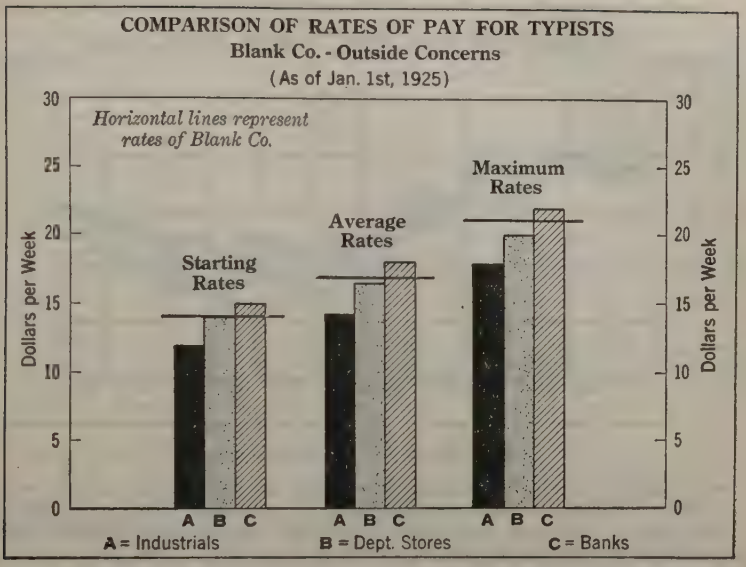


FIG. 20. Combination of Series of Bars with the Corresponding Bars of Each Series Grouped Together

CURVE OR LINE CHARTS.—In this case, the data, strictly speaking, are represented by vertical bars, but practically their magnitude is designated by points determined by the intersection of co-ordinate lines, one extending horizontally and the other vertically, from points on the base lines which, according to the prescribed scales, represent the magnitude of the data. The data are really represented therefore by the distance from the base lines to the points. Fundamentally, they are likewise of **two broad classes,** based on the character of the scales—(1) the **arithmetic** or **plain** and (2) the **geometric** or **ratio.** In the **plain scale** the vertical rulings are equally spaced—i.e., the distances between the lines which run horizontally across the chart field are equal. This is also true for the vertical lines. In the **geometric** or **ratio scale** the spacings are graduated in accordance with the logarithmic scale similar to that of the slide rule. This may apply to either the vertical or horizontal scale or both.

FORMS OF THE ARITHMETIC CURVE.—Of the arithmetic type of curve there is just one form distinct from the simple curve or group of simple curves. This is the form in which the area described by one or more curves is given prominence. There are **two principal kinds** of this form of curve—the zone curve and the band curve.

The Zone Curve.—The zone curve represents series of data principally which have maxima and minima. The data representing the series of minima and those representing the series of maxima are plotted and the space between the

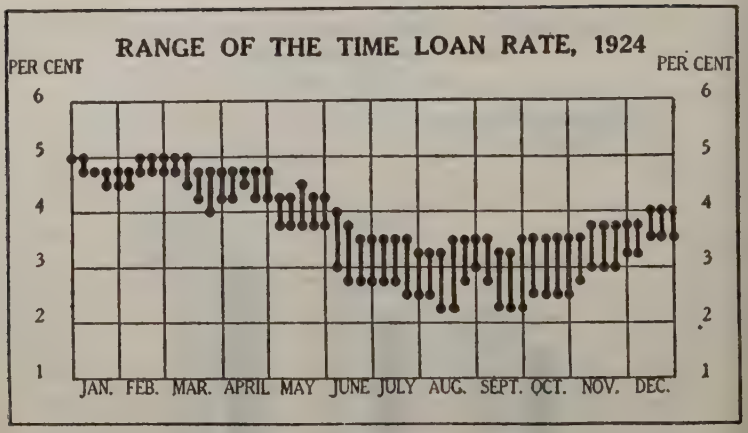


FIG. 21. A Typical Zone Curve

two is given a distinctive marking by means of coloring or otherwise cross-hatching. This type of curve is used freely in connection with security prices. The prices of the many individual sales range between rather narrow limits and are usually published showing the "high" and "low." Fig. 21 is a typical

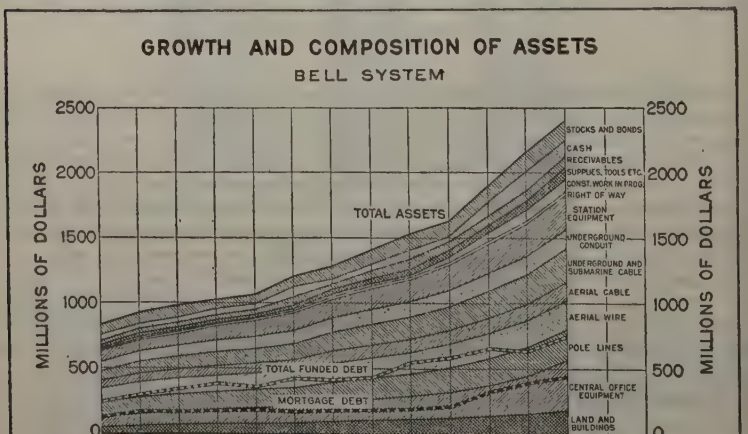


FIG. 22. A Typical Band Chart—Absolute Numbers
(From 1923 Annual Report of American Telephone & Telegraph Co.)

zone curve. **Other forms** are constructed by, (1) plotting the two series as straight line curves and filling in between, (2) plotting the two series with a year represented by a space, (3) plotting the points and connecting each pair with a straight vertical line. The average may be shown with any of these forms by dots or circles plotted between the high and low points for each time period. Other kinds of data will require this form of graph such as the rates of pay asked by applicants for positions, numbers of units per individual sale, starting and full pay rates in the community, interest rates, commodity prices, and so forth.

The Band Curve.—The band curve is used to show the **component parts of a whole.** It is similar in general character to the component bar. In its construction the various component elements are brought out through the plotting of a series of curves, the spaces between which are given distinctive markings. The several curves do not represent the separate component parts as measured from the horizontal base but beginning at the base they represent the parts cumulatively upward until the last represents the total figure. In Fig. 22, for example, the first curve from the base represents one component part, the second curve represents the first component part plus a second, and so on until the last curve represents a total of all of them. The spaces between the curves represent the component elements.

THE LOGARITHMIC OR RATIO GRAPH.—In practical statistical work in a business organization, logarithmic paper which can be obtained commercially will generally be adequate for most purposes, and hence there will be little necessity for constructing the scale.

How to Read the Logarithmic Curve.—Three different kinds of facts may be read directly from the logarithmic curve—(1) the **absolute numbers** which are read directly from the scale as in the arithmetic curve, (2) the **percentages of change** or, the ratios, which are estimated by inspection or determined more accurately by means of a scale, and (3) the **rates of change,** based primarily on the direction or slope of the curve. The method of determining the absolute numbers is simple. The actual percentages of increase or decrease, or, the ratios, will be a little more difficult. It is usually preferable, particularly for beginners, to construct a percentage scale to facilitate readings of this type. As the same percentage change will be represented by different distances on different scales, a separate percentage scale will have to be constructed for each separate chart where the scales differ. Detailed discussion of this point will be found on pages 51 to 54 of Haskell's "Graphic Charts in Business." The interpretations of the direction or slope of the logarithmic curve or portions thereof are summarized as follows on page 50 of Haskell's book:

1. If the curve is horizontal, neither ascending nor descending, the magnitudes are uniform, neither increasing nor decreasing.
2. If the curve ascends and is straight, or very nearly so, the magnitudes are increasing at a uniform, or very nearly uniform, rate.
3. If the curve ascends and bends upward, concave fashion, the magnitudes are increasing at an increasing rate.
4. If the curve ascends and bends downward, convex fashion, the magnitudes are increasing at a decreasing rate.
5. If the curve descends and is straight, or very nearly so, the magnitudes are decreasing at a uniform, or very nearly uniform, rate.
6. If the curve descends and bends upward, concave fashion, the magnitudes are decreasing at a decreasing rate.

7. If the curve descends and bends downward, convex fashion, the magnitudes are decreasing at an increasing rate.
8. If the direction of the curve in one portion is the same as that in another portion, the percentage rate of change is the same for both portions.
9. If the curve is steeper in one portion than in another portion the rate of change is more rapid in the former than in the latter.
10. If two curves on the same ratio chart are parallel to each other the same rate of change exists in both.
11. If one curve is steeper than another the rate of change in the former is more rapid than in the latter.
12. A straight line, either actual or imaginary, drawn so as to represent the general trend of a curve will show by its slope the average rate of increase or decrease of the curve; and the deviations from this average may be readily perceived.
13. A straight line, either actual or imaginary, may be drawn between any two points on the curve, between which it is desired to know the rate of change, and the slope of this line will show the rate of increase or decrease between the two points.

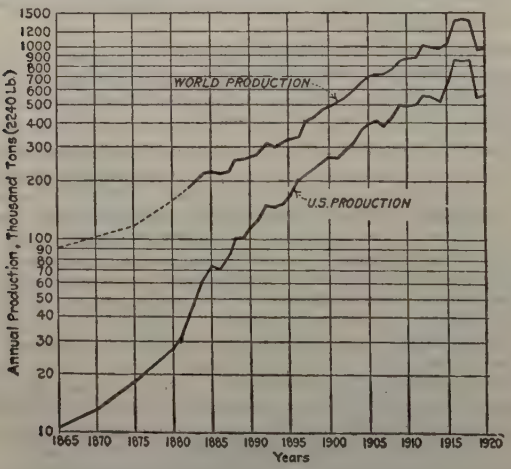


FIG. 23. A Typical Logarithmic Chart
The production of copper 1865-1920.

How the Ratio Graph is Used.—From the broad point of view, the logarithmic curve is used whenever the aim is to represent ratios or rates of change. Specifically, in practical work, it is used most extensively in the **presentation of historical data.** For the most part the forms of paper which may be secured commercially will be quite satisfactory for this purpose. The logarithmic curve will be used in presenting personnel, financial or operations data. Typical of the kinds of historical facts that may well be presented logarithmically are the number of employes, labor losses, absences, wages, expenses, revenues, net profits, production output, sales and materials purchased. The advisability

of presenting the data logarithmically will have to be decided in each specific case. Typical graphs of this form are represented in Figs. 23 and 24.

Comparative Value of the Logarithmic Graph.—The value of the logarithmic curve may be considered from two aspects. It may be compared in the first place with other methods of presenting ratios and rates of change and, in the second place, the comparison may be made with the arithmetic or difference curve. Ratios and rates of change in a series of data may be represented (1) by actually making these computations and plotting them on an arithmetic scale, or (2) by devising a scale on the grid so that the same results will be obtained by plotting the absolute numbers. The latter method has certain

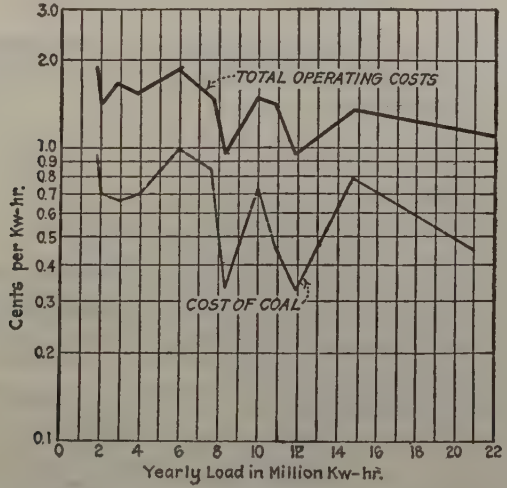


FIG. 24. Another Logarithmic Chart

Curves showing the influence of the cost of coal on the total operating cost of a large power plant.

distinct advantages. It shows the actual values, the relative values, the actual changes, and the relative changes while only a part of this information would be shown by the graph based on the computations; it avoids the necessity of selecting a base as is required in the computation of relatives; and it avoids the work of computation which in an elaborate series may be quite a burden. In the second case, the logarithmic curve is **not a substitute for the arithmetic.** They are designed to serve two separate purposes and consequently should supplement each other. It is frequently advisable to present the two at the same time, the one representing the comparison of the absolute amounts and the other reflecting the ratios and rates of change.

MAP CHARTS.—The statistical map or cartogram is nothing more than an ordinary map with statistical data graphically presented and associated with the territory on the map to which they relate. The distinctive feature of the statistical map is its **concrete representation of position.** The spatial significance

of the data is portrayed by the map and the mind is relieved of the burden of visualizing the territory to which the data are related. The real problem becomes one of representing the data on the map so that different territories may be readily distinguished or compared. The data are at hand for certain geographical units such as sections, townships, counties, groups of counties, states, and groups of states. They will usually be reduced to a per unit basis such as the population per square mile, sales per population, commodity consumption per capita, taxes per capita, and so forth. When this has been done the data are arrayed in ascending order and the highest and lowest figure noted. On the basis of this array the data are grouped into broader classes, the number depending on the character of the data and the purpose to be served in the particular case. It should be emphasized that the classes or groups should be of the same width or size.

There are different ways of representing these data on the map depending on the type of graphic mechanism selected to bring out the distinctions. Chief among these devices are colors, cross-hatching or shading, dots, and pins and ribbons, giving us what are called:

1. Color maps
2. Cross-hatch or shaded maps
3. Dot maps
4. Pin and ribbon maps

FLOW CHARTS.—The following description of flow charts is taken from "Graphic Statistics in Management" by Wm. Henry Smith.

"In some cases where component parts are not statistically comparable, it is still possible to chart them by means of some variation of the so-called flow chart. This type of figure has been extensively used in plotting **lines of authority, functions, etc., in organization work, and also in planning and routing.** It has, in addition, certain complicated and technical usages in engineering and scientific fields not within the scope of the work.

"Contrary to most other forms of charts, there is no accepted procedure or standardized practice for the construction of the various types of flow charts. The fundamental point is to choose the plan of organization or procedure desired, and construct the chart according to this plan. It is always wise, in such a case, to make a rough draft first, since in many cases it is necessary to make rearrangements in actual procedure. A chart constructed purely according to theory may not work out in practice, and, consequently, before the final draft is made, the plan should be put to the test.

The Organization Chart.—"The block and line method of constructing the organization chart is the most common, not only because it is easier to design but also because it is more adaptable to change than the more complicated forms. . . . The purpose of all organization charts is to show the exact relation each unit in the company or department bears to other units and the flow or source of responsiblity or authority. Hence, in the actual construction of the chart, it is wise to start with the source of authority and extend the chart downwards. It is sometimes necessary to find out from the men themselves just what functions they control. If there is any apparent conflict in authority, it should be settled at once and the organization chart constructed accordingly.

"Cross-section paper is preferable for use in construction of the rough draft.

"Circles may be used instead of the rectangular blocks. There is some tendency to use circles for functions, although the practice is by no means standard. The straight interconnecting lines may be replaced by curves if desired. This is possible, however, only in simple charts. Dotted lines may be

used to show relationships other than lines of authority, such as the position of committees, etc."

Planning Charts.—"A planning chart is constructed in somewhat the same manner as the organization chart, a merchandising, production, or other plan being substituted for the organization. The purpose is to prevent confusion and to show how various parts of the plan are inter-dependent and connected with the rest."

An example of a flow chart is presented in Fig. 39, page 1481.

Statistics for the Chief Executive

FUNCTIONS OF CHIEF EXECUTIVE.—Copeland in "Business Statistics" classifies the functions of the chief executive as follows:

1. To keep in constant touch with the condition of every part of his organization through the medium of constant and special channels of incoming information from every department.
2. To originate plans or policies that affect the organization as a whole and to execute his authority in keeping the various parts harmoniously adjusted and in regulating their efficiency to meet demand.

Because of the complexity of large organizations and the volume of detail involved in their operation, the exercise of control through personal observation and contact on the part of the chief executive is to a great extent impracticable. Immediate control must, therefore, be entrusted to subordinates and the true control of the chief executive is made possible and effective largely through the information which he receives from a comprehensive system of statistical reports and records. Upon these he depends for keeping in intimate touch with his business, in the formulation of his policies and in their successful execution. There are no arbitrary rules as to the specific statistical reports necessary for the chief executive. They must, of course, be apt, accurate and well presented. The following general classifications embody the **essential reports** necessary in the majority of businesses:

Internal conditions of the business
Competitors
Customers
Stockholders
Bank and credit institutions
General business conditions

The **most important statistics** for the chief executive are those relative to the internal affairs of his own organization. Such statistics may be divided into two general classes, those of a financial nature and those dealing with production and sales.

FINANCIAL REPORTS: THE BUDGET.—For discussion of the preparation and uses of various kinds of budgets the reader is referred to Section 4 on Budgets.

BALANCE SHEET AND PROFIT AND LOSS ANALYSES.—Balance sheets and profit and loss statements (see also Section 3 on Financial Statements and Reports) prepared for the chief executive should be accompanied by such analyses as will illumine facts and facilitate their interpretation. (For continuation of text see page 1467.)

The Condensed Balance Sheet

No.	ASSETS	Amount	%
1	CURRENT ASSETS:		
2	Cash	$ 50,000	5.0
3	Accounts Receivable	125,000	12.5
4	Inventories	200,000	20.0
5	Other Current Assets	25,000	2.5
6	Total Current Assets	$ 400,000	40.0
7	INVESTMENTS	$ 75,000	7.5
8	FIXED PROPERTY INVESTMENTS (Plant and Equipment)	400,000	40.0
9	INTANGIBLE FIXED ASSETS	100,000	10.0
10	DEFERRED CHARGES	25,000	2.5
11	Total Capital Employed	$1,000,000	100.0
	LIABILITIES AND CAPITAL		
12	CURRENT LIABILITIES:		
13	Accounts Payable	$ 25,000	2.5
14	Notes Payable	100,000	10.0
15	Other Current Liabilities	50,000	5.0
16	Total Current Liabilities	$ 175,000	17.5
17	LONG-TERM LIABILITIES (Bonds, etc.)	$ 200,000	20.0
18	RESERVES FOR DEPRECIATION	$ 25,000	2.5
19	NET WORTH:		
20	Capital Stock, Preferred	$ 100,000	10.0
21	Capital Stock, Common	400,000	40.0
22	Surplus Appropriated	50,000	5.0
23	Surplus Account	50,000	5.0
24	Total Net Worth	$ 600,000	60.0
25	Total Liabilities and Capital	$1,000,000	100.0

The Condensed Income Statement

No.		Amount	%	Per Cwt.
26	VOLUME OF BUSINESS (lbs.)	10,000,000	.....	.....
27	SALES	$1,000,000	100.0	$10.00
28	COST OF GOODS SOLD	700,000	70.0	7.00
29	GROSS EARNINGS	$ 300,000	30.0	$ 3.00
30	EXPENSES:			
	..... } In appropriate detail.			
31	Total Expenses	210,000	21.0	2.10
32	OPERATING PROFIT	$ 90,000	9.0	$ .90
33	INTEREST COSTS	25,500	2.5	.25
34	MISCELLANEOUS LOSS AND GAIN	4,500	.5	.05
35	SURPLUS NET PROFITS	$ 60,000	6.0	$ .60
36	DIVIDENDS, PREFERRED	7,000		
37	BALANCE AFTER PREFERRED DIVIDENDS	$ 53,000		
38	COMMON DIVIDENDS	$ 40,000		
39	SURPLUS ADJUSTMENTS	.....		
40	NET CHANGE IN SURPLUS	$ 13,000		

FIG. 25. Chart Summarizing Important Relationships to be Noted in Financial Statements

Balance Sheet Relationships		Measures of Earnings and Turnover *		Income Statement Relationships†
A–Net Working Capital (6–16)	$225,000.00	F–% Earned on Net Worth (35 ÷ 24)	10%	P–Average Prices (27 ÷ 26), $10.00 Per Cwt.
B–Working Capital Ratio (6 ÷ 16)	$ 2.28	G–% Earned on Common Stock (37 ÷ 21)	13.2%	Q–Gross Earnings, 30% on Sales and $3.00 Per Cwt.
C–How Capital is invested—Proportion of each of items 1-10 to number 11. That is the proportion of total capital in each class of assets.		H–Cost of Borrowed Money [33 ÷ (14 + 17)]	8½%	R–Expenses, 21% on Sales and $2.10 Per Cwt.
D–Sources from which capital is secured—Proportion of each of items 13-24 to number 25. That is the proportion of capital secured from each of the various sources.		I–% Operating Profits on Total Capital (32 ÷ 11)	9.0%	S–Operating Profits, 9% on Sales and $0.90 Per Cwt.
E–Book Value of Common Stock. The sum of numbers 21, 22, and 23 divided by number of shares outstanding. Assumed Preferred Stock has no interest in Surplus and Common Stock of $100.00 par value.	$ 125.00	J–Turnover of All Capital (27 ÷ 11)	$1.00	T–Interest Costs, 2.5% on Sales and $0.25 Per Cwt.
		K–Turnover on Fixed Property (27 ÷ 8)	$2.50	U–Surplus Net Profits, 6% on Sales and $0.60 Per Cwt.
		L–Turnover of Inventories (28 ÷ 4)	$3.50	
		M–Turnover of Accounts Receivable (27 ÷ 3)	$8.00	
		N–Lbs. Shipped per $1.00 of Plant Investment (26 ÷ 8)	25 lbs.	
		O–Fixed Property Expenses % on Plant Investment (Expenses in 28 and 30 ÷ 8).		

* The turnovers are stated above as dollars of sales per one dollar of capital used. They may also be stated as the number of times per year.

† The Cost of Goods Sold item should be supported by appropriate cost statement with unit costs and ratios developed.

FIG. 25 (Continued)

ASSETS

Accounts	Last Year		This Year		Increase or Decrease*
	Amount	%	Amount	%	
CURRENT ASSETS:					
Cash	$ 439,000	1.7	$ 456,000	1.5	$ 17,000
Accounts Receivable	7,163,000	27.7	8,460,000	27.7	1,297,000
(Days' Sales in Accounts Receivable)	72	.....	80	.....	.....
Inventories	10,844,000	41.9	13,250,000	43.3	2,406,000
(Year's Sales times Inventory)	2.9	.....	2.4	.....	.....
Prepaid Expenses	57,000	.2	74,000	.2	17,000
Marketable Securities	299,000	1.2	260,000	.8	*39,000
Total Current Assets	$18,802,000	72.7	$22,500,000	73.5	$3,698,000
INVESTMENTS:					
Investments in Other Companies, etc.	$ 78,000	.3	$ 578,000	1.9	$ 500,000
PLANT AND EQUIPMENT:					
Land	$ 81,000	.3	$ 101,000	.3	$ 20,000
Buildings less Depreciation	825,000	3.2	1,075,000	3.5	250,000
Machinery and Equipment less Depreciation	1,008,000	3.9	1,208,000	4.0	200,000
Small Tools and Movables less Depreciation	94,000	.3	206,000	.7	112,000
Total Plant and Equipment	$ 2,008,000	7.7	$ 2,590,000	8.5	$ 582,000
(Year's Sales times Fixed Assets)	15.2	.....	12.2	.....	.....
INTANGIBLE FIXED INVESTMENTS:					
Goodwill, Trade-Marks, Patents, etc.	$ 4,966,000	19.3	$ 4,966,000	16.1	.....
(Year's Sales times Total Assets)	1.2	.....	1.03	.....	.....
(Operating Profits, % to Total Assets)	7.1%	.....	8.1%	.....	.....
TOTAL	$25,854,000	100%	$30,634,000	100%	$4,780,000

Particulars
Sales
Operating Profits
Profits Available for Dividends
Preferred Dividends
Common Dividends
Balance to Surplus
% of Profits left in the Business

FIG. 26. Form of

LIABILITIES AND CAPITAL

Accounts	Last Year		This Year		Increase or Decrease*
	Amount	%	Amount	%	
CURRENT LIABILITIES:					
Accounts Payable, incl. Accrued Accounts	$ 2,015,000	7.8	$ 1,410,000	4.6	*$ 605,000
Notes Payable	5,548,000	21.4	7,851,000	25.7	2,303,000
Provision for Federal Taxes	1,325,000	5.1	1,600,000	5.2	275,000
Dividends Declared, Not Yet Paid	378,000	1.5	423,000	1.4	45,000
Total Current Liabilities	$ 9,266,000	35.8	$11,284,000	36.9	$2,018,000
NET WORKING CAPITAL	$ 9,536,000	.....	$11,216,000	.....	$1,680,000
RATIO CURRENT ASSETS TO CURRENT LIABILITIES	2.03	.....	1.99	.....	.....
BONDS OUTSTANDING:					
10-Year 1st Mortgage 6% Gold Bonds, due 1930	$ 500,000	2.0	$ 1,000,000	3.3	$ 500,000
NET WORTH:					
Preferred Stock 6%	$ 5,400,000	20.9	$ 5,400,000	17.6	.....
Common Stock	6,300,000	24.3	7,800,000	25.5	$1,500,000
(Book Value Common Stock)	155.00	.....	166.00	.....	.....
Appropriated Surplus:					
For Contingencies	400,000	1.6	400,000	1.3	.....
For Bond Sinking Fund Reserve	50,000	.2	100,000	.3	50,000
Surplus Account	3,938,000	15.2	4,650,000	15.1	712,000
Total Net Worth	$16,088,000	62.2	$18,350,000	59.8	$2,262,000
(% Earned on Net Worth)	8.3%	.....	8.7%	.....	.....
(% Earned on Common Stock)	16.0%	.....	16.4%	.....	.....
TOTAL	$25,854,000	100%	$30,634,000	100%	$4,780,000

Last Year		This Year	
Amount	%	Amount	%
$30,826,000	100.0	$31,691,000	100.0
1,838,000	6.0	2,500,000	7.9
1,338,000	4.3	1,600,000	5.0
$ 324,000	.....	$ 324,000	.....
280,000	.....	564,000	.....
734,000	.....	712,000	.....
55%	.....	34%	.....

Analytical Balance Sheet

Particulars	19—		19—		19—	
	Amount	%	Amount	%	Amount	%
1. Cash	$ 50,000	5.0				
2. Accounts Receivable	125,000	12.5				
3. Inventories	200,000	20.0				
4. Other Current Assets	25,000	2.5				
5. Total Current Assets	$ 400,000	40.0				
6. Investments	$ 75,000	7.5				
7. Fixed Property Investment	400,000	40.0				
8. Intangible Fixed Assets	100,000	10.0				
9. Deferred Charges	25,000	2.5				
10. Total Capital Employed	$1,000,000	100.0				
11. Accounts Payable	$ 25,000	2.5				
12. Notes Payable	100,000	10.0				
13. Other Current Liabilities	50,000	5.0				
14. Total Current Liabilities	$ 175,000	17.5				
15. Long-Term Liabilities	$ 200,000	20.0				
16. Reserves for Depreciation	25,000	2.5				
17. Capital Stock—Preferred	$ 100,000	10.0				
18. Capital Stock—Common	400,000	40.0				
19. Surplus Appropriated	50,000	5.0				
20. Surplus Account	50,000	5.0				
21. Net Worth	$ 600,000	60.0				
22. Total Liabilities and Capital	$1,000,000	100.0				
23. Net Working Capital	$ 225,000					
24. Working Capital Ratio	$ 2.28					
		% to Sales				
25. Volume of Business, lbs	10,000,000					
26. Pounds per $1 of Plant Investment	25					
27. Sales, amount	$1,000,000	100.0				
28. $ of Sales per $1 of All Capital	$1.00					
29. $ of Sales per $1 of Plant Investment	$2.50					
30. $ of Sales per $1 of Inventory	$5.00					
31. $ of Sales per $1 of Accounts Receivable	$8.00					
32. Gross Earnings	$ 300,000	30.0				
33. Per Cwt	$3.00					
34. Expenses	$ 210,000	21.0				
35. Per Cwt	$2.10					
36. Operating Profits	$ 90,000	9.0				
37. Per Cwt	$0.90					
38. % on All Capital	9.0%					
39. Miscellaneous Loss and Gain	$ 4,500	.5				
40. Interest Cost	$ 25,500	2.5				
41. % on Borrowed Money	8.5%					
42. Surplus Net Profits	$ 60,000	6.0				
43. % on Net Worth	10.0%					
44. Dividends—Preferred	$ 7,000					
45. Dividends—Common	$ 40,000					
46. Dividends—Other						
47. Surplus Adjustments						
48. Net Change in Surplus	$ 13,000					
49. Book Value of Common Stock	$ 125.00					
50. % Earned on Common Stock	13.2%					

FIG. 27. Method of Summarizing Financial Statistics and Ratios of a Business

NOTE.—This form may be built very advantageously to compare years, preferably to show the changes from pre-war times down to date. It may be used for comparing monthly balance sheets, in which case all turnovers and measures of earnings should be reduced to a yearly basis; for example, the per cent earned on net worth per year as based on the rate of current month, etc.

James H. Bliss, in "Financial and Operating Ratios in Management," presents the following analyses as those which he considers among the more important:

1. Surplus net profits earned on stockholders' investment.
2. Operating profits earned on total capital employed.
3. Turnover of total capital used.
4. Turnover on plant investment.
5. Turnover of inventories.
6. Turnover of accounts receivable.
7. Cost of borrowed capital.
8. Cost of all capital employed.
9. Relation of fixed property expenses to property investment.

The method of presenting these data is illustrated in Figs. 25, 26 and 27.

MISCELLANEOUS INTERNAL FINANCIAL STATISTICS.—It would be a good plan for every executive to have before him a general table or chart showing the **fixed expenses** in his particular plant and the **relation of the variable expenses to sales** during a normal period. To illustrate by a simple example, assume that in a given plant the previous year's business was considered a fairly normal year. The sales volume average per month was shown to be $700,000. The fixed expense in this plant was $150,000 per month, whereas the average variable expense per month was $400,000. The chart in Fig. 28 can then be drawn showing these conditions. It will be seen that if the present business is taken on the same basis as shown on the chart, namely, if the same relation exists between the established sales prices and the cost of getting out those sales, then the particular plant in question must do a sales volume of approximately $350,000 before it reaches its "point of profit," or the point at which the plant begins to make money. In the chart in Fig. 28, the horizontal scale has no significance as the data are charted for only one given set of conditions. The width of the chart does not affect the proportion. A typical form of chart which may be used in showing how **actual profits compare with a set standard** is presented in Fig. 29.

PRODUCTION AND SALES REPORTS.—Typical production and sales reports, classified as to periods of frequency, are shown in the following:

Daily Reports:
- Orders Received (units)
- Cancellations "
- Production "
- Unfilled Orders "
- Sales (value) "
- Shipments "
- Employees Working

Semi-Weekly Reports:
- Total Orders for Week to Date (units)
- Total Cancellations for Week to Date (units)
- Total Production for Week to Date (units)
- Number of Employees on Roll and Estimated Payroll
- Spoiled or Second-Grade Product for Week to Date (units)
- Shipments for Week to Date (units)
- Sales for Month to Date (value)
- Bank Balance Compared with Previous Week and Previous Year
- Production vs. Employees
- Purchase Orders Placed with Vendors Week to Date (value)

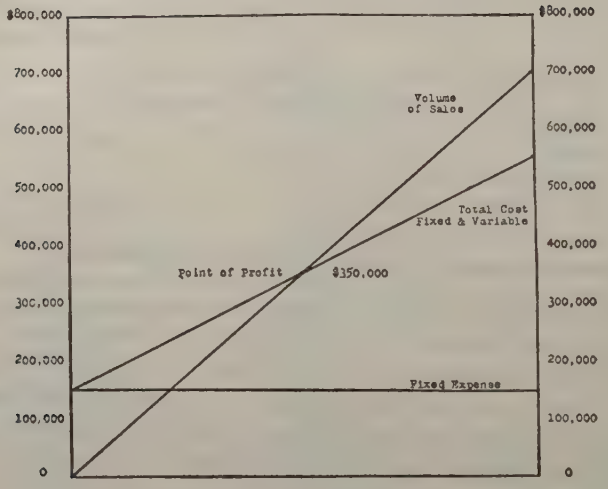


FIG. 28. Point of Profit Chart

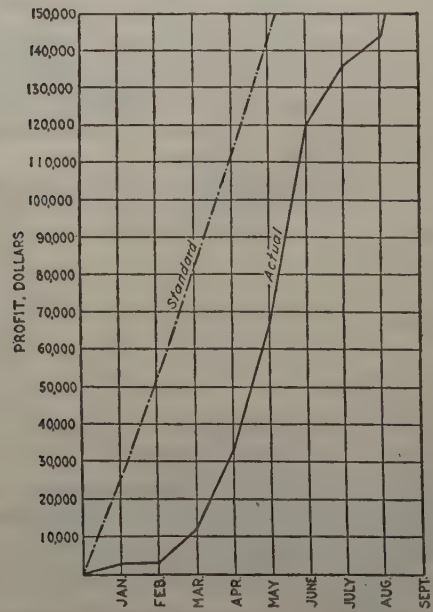


FIG. 29. Standard versus Actual Profits—Cumulative by Months

Monthly Reports:

Total Orders Received for Month (units)
Total Cancellations for Month (units)
Total Production for Month (units)
Number of Employees and Payroll
Total Shipments for Month (units)
Total Sales for Month (value)
Total Discards or Second-Grade Products for Month (units)
Bank Balance at End of Month Compared with End of Previous Month and End of Same Month Previous Year
Production vs. Shipments (units and value)

In the foregoing tabulation the suggested daily reports number seven, the semi-weekly reports ten and the monthly reports nine. In actual practice amplifications would probably be found desirable or necessary which would considerably increase the number given above.

PREPARATION AND CONSOLIDATION OF REPORTS.—Supervision of the preparation of the reports is often entrusted to an **assistant in the office of the chief executive.** Upon him devolves the responsibility for presenting to the chief executive the reports in their final form. A **consolidation of all the reports** is often made, of which an illustration appears in Fig. 30.

The **purpose of the consolidated report** is to reduce cumbersome statistics to a uniform and simplified basis without the omission of any essential facts. Properly prepared it becomes a mirror of conditions throughout the business which the busy executive may slip into his pocket and preserve for reference. The assistant in charge of reports should decide upon the **standard forms** in which he desires that information be delivered to him. Frequent changes in form multiply errors, are expensive and make comparisons difficult. In the majority of cases, semi-weekly consolidated reports at most are sufficient to be issued, for example, on Tuesdays and Fridays. The information for the Tuesday report is received in the office on Monday and includes the previous Saturday, except that sales and purchase orders are usually not so easily obtained and are available perhaps only up to the close of the next previous day (Friday). Quite frequently, to avoid delay, data are received by telephone, to be checked against written reports when they are later available. The consolidated report is typed and ready for checking early Tuesday morning. At that time all written reports should be in, and the accuracy of the consolidated report can be verified. The completed report is then carefully examined by the assistant and the **salient points noted.** A written interpolation here and there to call attention to increasing inventories or low sales, or the notation "decreasing" or "increasing" in the margin will serve to aid the chief executive in his analysis of the figures. The report should be delivered to the chief executive promptly at the same time each Tuesday and Friday, and every effort should be made to adhere closely and rigidly to the fixed schedule.

PRODUCTION AND SHIPMENT REPORTS.—There are many miscellaneous reports which might be embodied to advantage in the consolidated report. One of these is a tabulation showing the **production per man** as compared with a standard previously set. This is the report referred to above as "Production vs. Employees," in the tabulation of suggested reports. A specimen form is shown in Fig. 31.

Another tabulation of value is a **comparison of production with shipments** for the month as in the form shown in Fig. 32.

[*Page 4*]

[This space available for periodic reports of variable frequency.]

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SEMI-WEEKLY CONSOLIDATED REPORT

MONDAY JANUARY 12

ALL DIVISIONS

Sales—Shipped and Billed (Month to Date)

	Jan. 9	Dec. 9
Division #1	$	$
Division #2		
Division #3		
Division #4		
Division #5		
Total	$	$

Purchase Orders Placed with Vendors

	Jan. 9	Dec. 9
Division #1	$	$
Division #2		
Division #3		
Division #4		
Division #5		
Total	$	$

Employees on Roll and Estimated Payroll

	Men Jan. 10	$ Jan. 10	Men Dec. 10	$ Dec. 10
Division #1		$		$
Division #2				
Division #3				
Division #4				
Division #5				
Total		$		$

Treasury Service

Bank Balance January 10, 1924	$
Bank Balance January 3, 1925	$
Bank Balance January 10, 1925	$

FIG. 30. Consolidated Report Made to Chief Executive (*Face*)

[*Page 2*]

DIVISION #1

	Jan. 10	Jan. Accum.	Jan. Aver.
Orders Received			
Cancellations			
Shipped			
Delivered to Stock			
Unfilled Orders			
Stock on Hand			
Excess of Ship. over Prod. from Dec. 31, 19—			
Empl. Working: Fcty.: Fcty. Of.: Stockroom:			

DIVISION #2

	Jan. 10	Jan. Accum.	Jan. Aver.
Orders Received			
Cancellations			
Shipped			
Delivered to Stock			
Unfilled Orders			
Stock on Hand			
Excess of Ship. over Prod. from Dec. 31, 19—			
Empl. Working: Fcty.: Fcty. Of.: Stockroom			

DIVISION #3

	Jan. 10	Jan. Accum.	Jan. Aver.
Orders Received			
Cancellations			
Shipped			
Delivered to Stock			
Unfilled Orders			
Stock on Hand			
Excess of Ship. over Prod. from Dec. 31, 19—			
Empl. Working: Fcty.: Fcty. Of.: Stockroom			

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DIVISION #4 [*Page 3*]

	Jan. 10	Jan. Accum.	Jan. Aver.
Orders Received			
Cancellations			
Shipped			
Delivered to Stock			
Unfilled Orders			
Stock on Hand			
Excess of Ship. over Prod. from Dec. 31, 19—			
Empl. Working: Fcty.: Fcty. Of.: Stockroom			

DIVISION #5

	Jan. 10	Jan. Accum.	Jan. Aver.
Orders Received			
Cancellations			
Shipped			
Delivered to Stock			
Unfilled Orders			
Stock on Hand			
Excess of Ship. over Prod. from Dec. 31, 19—			
Empl. Working: Fcty.: Fcty. Of.: Stockroom			

[This space is available for periodic reports occurring at irregular intervals or can be used for notes drawing attention to good or bad conditions disclosed by the figures in the five divisional reports.]

FIG. 30. (*Reverse*)

Production vs. Employees

STANDARD: 10 Units per Day per Man Being the 19__ Average

Week Ended	Average No. of Empl. for Week		Bogey		Theoretical Performance	Actual Units Produced per Day	Actual Production per Day per Man
Jan. 10	100	×	10	=	1,000	950	9.5

FIG. 31. Table Showing Production per Man Compared with Set Standard

As previously stated, one of the functions of the chief executive is "to originate plans or policies that affect the organization as a whole and to execute his authority in keeping the various parts harmoniously adjusted and in regulating their efficiency to meet demand." In order to perform this function the chief executive must receive currently a record of **actual production as compared with the required output** determined previously.

Excess of Shipments Over Production

MONTH OF JANUARY

	Quantities			Value At Cost Prices	
	Production	Shipments	Increase* Decrease	Increase*	Decrease
Division #1	500	600	100	$1,000	
Division #2	750	1,000	250	1,250	
Division #3	1,500	1,350	**150**	**1,500**	
Division #4	900	850	**50**		**250**
Division #5	1,200	1,500	300	1,500	
Excess of Shipments over Production				$2,000	

* Bold face figures indicate Increase in Production over Shipments.

FIG. 32. Comparison of Production with Shipments

REPORTS ON COMPETITORS.—The chief executive has to keep in touch at all times with the **progress of competitors,** as to sales, profits, inventories, etc. Charts showing results or achievements of the company's product compared with those of the product of a competitor sometimes disclose surprising results. Where the capital stock of a competitor is not closely held, the **financial trend of the competing business** may often be indicated by market fluctuations of its stock. Balance sheets and earning statements obtained from credit rating services, investment manuals or other sources, are often compared with similar statements of the executive's own business, in order that the comparative position of the two companies may be ascertained, either in amounts or in percentages.

REPORTS ON CUSTOMERS.—Where the scope of a business is such that it has jobbing points established throughout the country, the jobbers are often visited periodically by representatives of the business. The representative or traveler sends reports to his immediate superior (usually located in the sales department) or to the chief executive. Such reports contain facts relating not only to the jobber visited but also to **conditions as a whole in that**

particular locality—the population, principal industries, competition, etc. Through study of these reports as well as the various sales reports received, the chief executive is able to keep in close touch not only with the business as a whole but also with each particular territory in which his product is marketed.

REPORTS TO STOCKHOLDERS.—In "Graphic Methods for Presenting Facts," Mr. W. C. Brinton says:

"It is highly desirable that corporations should not only keep their old stockholders, but should attract new ones. The surest way to accomplish this end is to treat stockholders with the utmost frankness. Although considerable publicity is already given to the affairs of the larger corporations, further publicity is desirable. The average stockholder does not as a rule understand a balance sheet, and has only the vaguest idea of his company's affairs. So long as dividend payments are maintained, he is content. To be sure, a stockholder can always get an impartial and valuable opinion from an investment banker concerning the past records and future prospects of any company, but it would be well if the annual reports of boards of directors to stockholders contained material from which the investor could judge for himself to a greater extent. The material included should show the records of the company over a period of years, for the company's achievement in any one year may be unnecessarily discouraging, or fictitiously encouraging. These records are most easily understood when put in graphic form. With such graphic presentations any stockholder can learn instantly how the fiscal year under review compares with the several years preceding."

The duty of preparing such a financial report rests with the chief executive if not with the president. The following statements made by Mr. Brinton present the questions which are usually uppermost in the minds of the stockholders and which may be graphically answered.

"What figures for an annual report should always be shown in chart form to make comparisons most clear is hard to determine, but it will doubtless be agreed that, if possible the charts should attempt an answer to these questions that naturally arise in the stockholder's mind.

"1. Has the earning power of the company been maintained?
2. Is the property being kept in proper physical condition?
3. Is the financial condition sound?"

REPORTS FOR BANKS AND OTHER CREDIT INSTITUTIONS.—Where the financing of the business is accomplished through the medium of **bank** loans, information pertaining thereto is of vital importance to the chief executive. **Borrowings must be minimized** to avoid heavy interest charges, and proper control can be exercised only through knowledge of the facts. **Contact with the banks** is maintained by personal visits and by regular correspondence, so that bank officials may keep in touch with the latest available financial statements of the company, properly certified. The statements should lend themselves readily to comparisons of several past years, and the attention of the bank should be called to any radical changes in policy or financial standing.

Every business of any size is constantly requested for **credit** information, balance sheets, etc., by various organizations publishing credit services. Such information is of a more or less confidential nature and publication should be permitted only after the greatest scrutiny. **Standard practices** should be established relative to the supplying of such information.

REPORTS ON GENERAL BUSINESS CONDITIONS.—The success and growth of any business is affected not only by conditions within its own organization, but by fundamental economic factors governing prices, money rates, wages, markets and the tone of the business world at large. It is therefore necessary that the chief executive keep himself at all times well informed as to these fundamental conditions—conditions that send the business world around its perpetual cycle of succeeding periods of prosperity, decline, depression and improvement.

The Executive Note Book

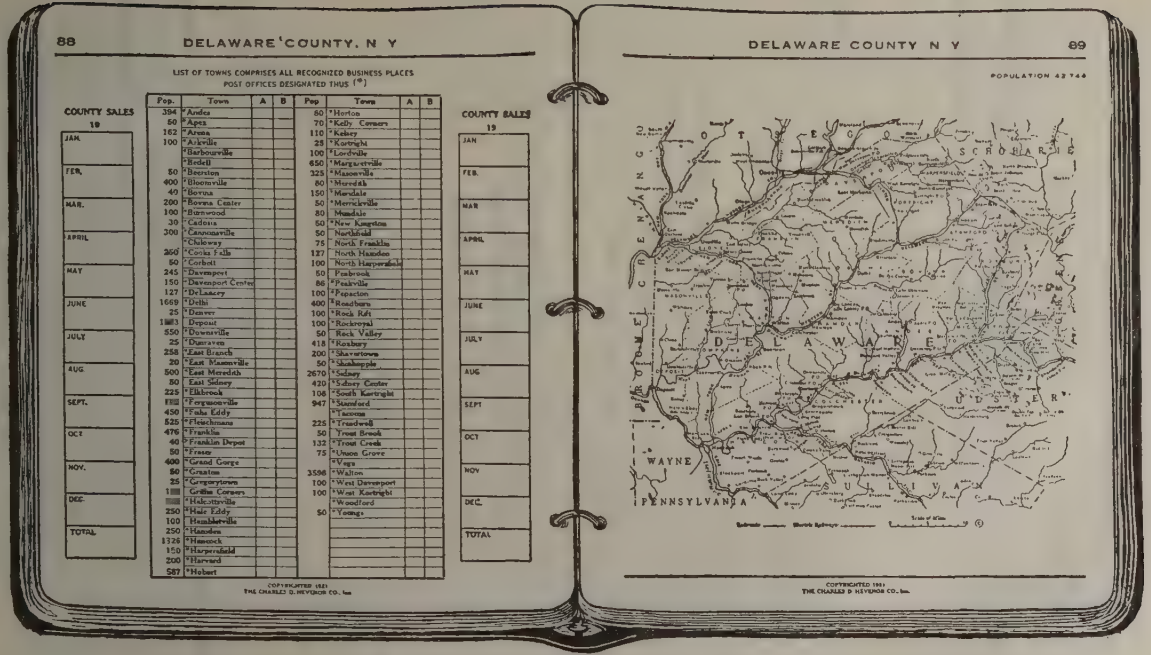
PREPARATION.—By executive note book is meant any reasonably small book of record wherein are posted or kept systematically facts and figures for ready reference as an aid or guide in the management of a business enterprise. Some executives easily acquire and hold the note book habit, and constantly refer to their convenient record for facts or figures. To others this is an irksome task—something to be left to subordinates who handle the details of the business. Usually the executive note book contains an assortment of company secrets. Sometimes it becomes merely a repository for unconsulted statements, religiously kept up by a secretary, but seldom referred to. To devise a note book which contains neither too much nor too little calls for the soundest of judgment.

The **secretary or assistant nearest to the executive** is usually the one best qualified to keep the note book systematically. As letters, reports, or statements are received, facts and figures of importance are noted for insertion in the record. Sometimes the note book is kept in duplicate. Each copy can then be brought up to date, while the other is in possession of the executive, who is thus assured the use of one copy at all times.

PHYSICAL CHARACTERISTICS.—For the note book itself, a loose-leaf binder is desirable because of its flexibility through substitution of sheets. For pocket use the 3 x 5 or 4 x 6 is most popular; for desk use, the 8½ x 11. A specimen 8½ x 11 binder is shown in Fig. 33. The paper used is generally about 16 pounds to the ream of 17 x 22 sheets. For different classes of facts, different colored sheets may be used. Sales sheets may be buff; operating sheets, pink; financial sheets, grey; or the color arrangement in the case of a consolidated group of corporations may be established so that each color will represent a corporation or corporate group. Colors may facilitate reference under systems of classification, viz., by years, districts, departments, etc.

A TYPICAL EXECUTIVE NOTE BOOK.—Executive note books vary with the nature of the business and wishes of the executives. A few **typical pages** are illustrated in Figs. 34 to 43 with explanations. These sample sheets are merely indicative of certain information which has been put in an executive note book. The following general classifications summarize the usual contents of a well developed note book:

1. Balance Sheet
2. Competition
3. Corporation Information
4. Customers
5. Loans
6. Organization Chart
7. Payrolls



88 DELAWARE COUNTY, N Y

LIST OF TOWNS COMPRISES ALL RECOGNIZED BUSINESS PLACES
POST OFFICES DESIGNATED THUS (*)

COUNTY SALES 19

JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG.
SEPT.
OCT
NOV.
DEC.
TOTAL

Pop.	Town	A	B
394	*Andes		
50	*Apex		
162	*Arena		
100	*Arkville		
	*Barbourville		
	*Bedell		
50	*Beerston		
400	*Bloomville		
40	*Bovina		
200	*Bovina Center		
100	*Bramwood		
30	*Cadosia		
300	*Cannonsville		
	*Chelsea		
360	*Cooks Falls		
50	*Corbett		
245	*Davenport		
150	*Davenport Center		
127	*DeLancey		
1669	*Delhi		
25	*Denver		
1881	Depoat		
550	*Downsville		
25	*Dunraven		
258	*East Branch		
20	*East Masonville		
500	*East Meredith		
50	East Sidney		
225	*Elkbrook		
1153	*Fergusonville		
450	*Fishs Eddy		
525	*Fleischmans		
476	*Franklin		
40	*Franklin Depot		
50	*Fraser		
400	*Grand Gorge		
50	*Granton		
25	*Gregorytown		
1111	Griffin Corners		
1111	*Halcottsville		
250	*Hale Eddy		
100	Hambletville		
250	*Hamden		
1328	*Hancock		
150	*Harpersfield		
200	*Harvard		
587	*Hebert		

Pop.	Town	A	B
80	*Heron		
70	*Kelly Corners		
110	*Kelsey		
25	*Kortright		
100	*Lordville		
650	*Margaretville		
325	*Masonville		
80	*Meredith		
150	*Mandale		
50	*Merrickville		
80	Mundale		
50	*New Kingston		
50	Northfield		
75	North Franklin		
127	North Hamden		
100	North Harpersfield		
50	Peakbrook		
86	*Peakville		
100	*Pepacton		
400	*Roxbury		
100	*Rock Rift		
100	*Rockroyal		
50	*Rock Valley		
418	*Roxbury		
200	*Shavertown		
50	*Shinhopple		
2670	*Sidney		
420	*Sidney Center		
106	*South Kortright		
947	Stamford		
	*Tiocona		
225	*Treadwell		
50	*Trout Brook		
132	*Trout Creek		
75	*Union Grove		
	*Vega		
3598	*Walton		
100	*West Davenport		
100	*West Kortright		
	*Woodford		
50	*Young's		

COUNTY SALES 19

JAN.
FEB.
MAR
APRIL
MAY
JUNE
JULY
AUG
SEPT
OCT
NOV
DEC.
TOTAL

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DELAWARE COUNTY N Y 89

POPULATION 42 746

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FIG. 33. A Typical Executive Note Book

8. Prices
9. Profit and Loss Statement
10. Sales
11. Standard Practice
12. Vendors

The executive note book is not limited to the type of information suggested in these pages; and facts of vital interest may be incorporated in it.

Index.—The index of a typical executive note book may appear as shown in Fig. 34.

INDEX

PAGE

1. BALANCE SHEET:
   Condensed Form for 3 x 5 Note Book
2. COMPETITION:
   Charts Showing Performance of Product with That of Competitors, etc.
3. CORPORATE INFORMATION:
   Capital Stock: Authorized and Issued: Par Value, Stockholders, Directors, Officers
4. CUSTOMERS:
   Principal Customers, Total Shipments by Years
5. LOANS:
   Chart Showing Inter-company and Bank Loans
6. ORGANIZATION CHART:
   Showing Principal Offices, etc.
7. PAYROLLS:
   Offices, Foremen, etc., by Years. Bonuses, Remarks. Total Company Payroll, by Departments and Months. Total Company Payroll (Employees) by Departments and Months
8. PRICES:
   Commodity Prices to Jobbers, Dealers or Customers
9. PROFIT AND LOSS STATEMENT:
   Condensed Form
10. SALES:
    Current Year by Months and Accumulative
    Previous Years by Months and Accumulative
11. STANDARD PRACTICES:
    By-laws, etc.
12. VENDORS:
    Names, Commodities, Yearly Purchases

FIG. 34. Index to Executive Note Book

Balance Sheet.—The **latest condensed balance sheet** of the corporate group, or single company should be at hand. One each quarter often suffices for purposes of the executive note book. A condensed balance sheet form may be used (Fig. 35). Another similar sheet may show the **forecast balance sheet,** as an indicator of the business trend and as a guide to executive decisions.

Competition.—It is always advisable for the executive to be well informed concerning competitors, their financial condition, sales data, etc. The most useful type of information will be determined by the nature of the business. Such information should be continued on a page of the executive note book.

	Feb.	First Quar.			Second Quar.			Third Quar.			Fourth Quar.		
		Mar.	Apr.	May	June	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
Cash													
Cash (Gov't Bonds)													
Accts. Rec. (Less Reserves)													
Notes Receivable													
Sundry Accts. Rec. (Since Paid)													
Inventories { Raw Materials													
Inventories { Work in Process													
Inventories { Finished Stock													
Prepayments – Insurance, etc.													
TOTAL CURRENT ASSETS													
Accts. Payable (Trade Credits)													
Notes Payable (Loans)													
Sundry Accts. Pay. (Since Paid)													
Accrued Pay Rolls, etc.													
Accrued Inc. & Exc. Prof. Taxes													
TOTAL CURRENT LIABILITIES													
Working Capital													
Add—Investments													
TOTAL WORKING CAPITAL													

Fig. 35. Balance Sheet Page from Executive Note Book (*Face*)

	Feb.	First Quar.			Second Quar.			Third Quar.			Fourth Quar.		
		Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
Land													
Buildings (Less Reserves)													
Equipment " "													
TOTAL FIXED ASSETS													
Mortgages on Real Estate													
Bonded Indebtedness													
TOTAL FIXED LIABILITIES													
NET WORTH (Before deducting Cont. Res.)													
Less—Contingent Reserves													
Net Worth (Before adding Patents)													
Add – Patents													
NET WORTH													
CAPITAL STOCK and SURPLUS													
Preferred													
Common													
Surplus													
Dividends Paid { Monthly													
Dividends Paid { Cumulative													
Surplus Earned													

Fig. 35. (*Reverse*)

General Corporate Data.—The chairman of the board, president, vice-president or other officer, frequently desires to refer to certain corporate facts as to changes in capitalization, number of shares, floating debt, date of incorporation, mergers, dissolutions, directors, officers, etc. A sample condensation of those is given in Fig. 36. This is particularly useful in the case of an affiliated corporate group where memory would be taxed by the details; it also serves in cases where outside corporations are being watched either because they are competitors, or because their securities are held. Under "Remarks" a variety of information may be made available to the executive.

Corporate Information
Corporation No. 1

A. B. C. CORPORATION
INCORPORATED, JUNE 7, 1899, IN NEW JERSEY

	Preferred	Common
Capital stock authorized	$3,000,000	$12,000,000
Capital stock issued	3,000,000	12,000,000
Par value per share	100.00	100.00

Registrar of stock – Blank Trust Co.

Floating Debt:
(Description, dates, amounts, interest rates, maturities.)

Stockholders:
(All or only a few of the main stockholders may be listed. Use separate sheets if desired.)

Officers	Title
	Chairman of the Board
	President
	Vice-President
	Vice-President
	Treasurer
	Secretary
	Other officers

Corporate Information:
Fiscal Year Begins March 1.
Statutory Agent in New Jersey is Mr. A. B. Collins.
Statutory Agent in New York is Mr. D. E. Fay.
Registered to do business in the following states:
New York
Massachusetts
Pennsylvania
Illinois
Annual Meeting: Third Friday in May.

Remarks:

THIS SHEET REVISED TO SEPTEMBER 15, 19—.

FIG. 36. Corporate Information in Executive Note Book

Sales to Customers.—A list of the company's principal customers or dealers as the case might be, showing territory covered and total sales in round figures for the previous 4 or 5 years, may be inserted in the note book in the compact form illustrated in Fig. 37.

Sales to Customers

Name	Territory Covered	Shipments			
		1921	1922	1923	1924
# 1 —					
2 —					
3 —					
4 —					
5 —					
6 —					
7 —					
8 —					
9 —					
10 —					
11 —					
12 —					
13 —					
14 —					
15 —					
Total					

Fig. 37. List of Customers, Sales, etc.—Executive Note Book

Loans.—Figures relating to the company's financing plans are always of vital interest. The chart shown in Fig. 38 gives the status of bank loans at a glance in convenient form for insertion in the executive note book.

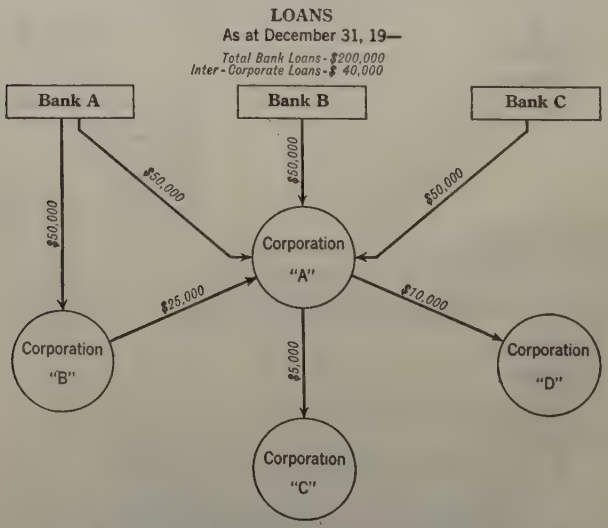

Fig. 38. Status of Bank Loans—Executive Note Book

Organization Chart.—Charts serve to define in a fashion easily understood the organization of a business. They give at a glance the plan of management operative throughout the business and are some of the most useful of all the

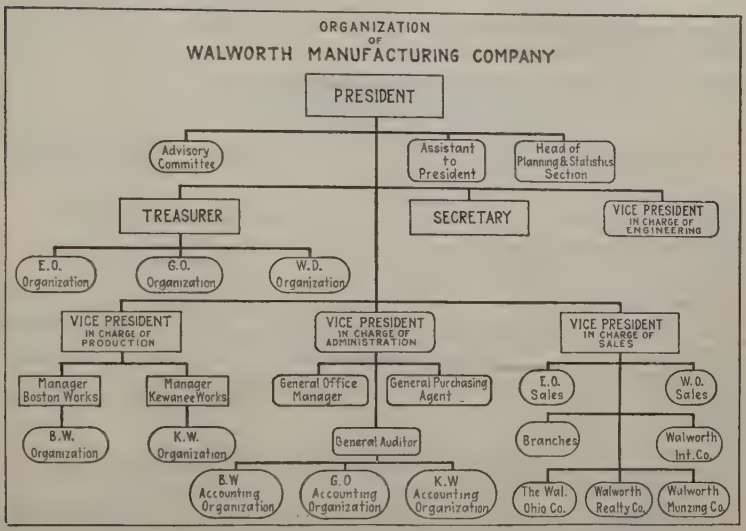

FIG. 39. Organization Chart—Executive Note Book

sheets contained in the executive note book. A typical example of an organization chart is presented in Fig. 39.

Payrolls.—A list of the department heads, etc., by individuals, with columns for changes in salary and bonuses if desired, may be presented in the executive note book as shown in Fig. 40. In addition to this a tabulation may be shown by departments giving in dollars and by months or other convenient periods similar detailed information as to payrolls. Employees may be indicated in the same manner and in the same general form.

Payrolls

NAMES	1922	1923	1924	1925	Bonuses
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

FIG. 40. Payroll Information in Executive Note Book

Prices.—A sheet may be set aside for a tabulation showing a list of prices and discounts allowed on the company's various products. A comparison may be

made over a period of time such as would indicate the changes in list price or discount on the main products which the company sells.

Profit and Loss Statement

A. B. MANUFACTURING COMPANY, INC.

YEAR ENDING FEBRUARY 28, 19—

Income		
Gross Sales	$xx xxx xxx xx	
Less Cost of Goods Sold	xx xxx xxx xx	$xx xxx xxx xx
Gross Income from Other than Manufacturing		xxx xxx xx
Interest		xx xxx xx
Rentals		x xxx xx
Royalties		xx xxx xx
TOTAL		$xx xxx xxx xx
Deductions		
Officers' Salaries	$ xxx xxx xx	
Repairs	xx xxx xx	
Interest	xx xxx xx	
Taxes	xx xxx xx	
Bad Debts	xx xxx xx	
Depreciation	xx xxx xx	
Miscellaneous Expenses	x xxx xx	
TOTAL		$ x xxx xxx xx
NET PROFIT OR LOSS		$ xxx xxx xx

FIG. 41. Profit and Loss Statement—Executive Note Book

Sales

CUMULATIVE MONTHLY—19—

Total Last Year	19—	Grand Total	COMPANY "A"		COMPANY "B"		COMPANY "C"	
			Month	Accumulative	Month	Accumulative	Month	Accumulative
	Jan.							
	Feb.							
	March							
	April							
	May							
	June							
	July							
	August							
	etc.							

ANNUAL

Year	Grand Total	Company "A"	Company "B"	Company "C"
1920				
1921				
1922				
1923				
1924				

FIG. 42. Sales Information in Executive Note Book

Profit and Loss Statement.—The outline of a profit and loss statement shown in Fig. 41 is indicative of the general form of statement found to be useful in an executive note book.

Sales.—The forms suggested in Fig. 42 for tabulating sales may be varied to meet the characteristics of the corporate group or single company for which they are being compiled. Further detail may be added by analyses according to principal products.

Standard Practices.—The standard practices of the company may be:

1. By-Laws
2. Duties of Officials:
   - (a) Treasurer
   - (b) Secretary
   - (c) Auditor
   - (d) Other officials
3. Any other statement of Standard Practices, Rules, Codes, Policies, etc.

Vendors.—The company's principal vendors are listed, the main commodities supplied, and, in round figures, the amount purchased annually, in dollars, as shown in Fig. 43.

Vendors

Name	Commodity	Yearly Aggregate

Fig. 43. List of Vendors, etc.—Executive Note Book

The Statistical Department

PLACE OF THE STATISTICAL ORGANIZATION IN THE COMPANY.—The statistical organization may be located at various places in the company, according to the way it has grown up, and good statistical service is being rendered in practical business concerns by statistical organizations having different places in the company. Generally, however, it is preferable to have the statistical organization located **in the accounting department** with the chief statistician reporting to the head of that department. This is because of the fact that the accounting department in its routine functions maintains records of a great amount of statistical detail and as a matter of fact the system of basic statistical records will perhaps be preferably built up through an expansion and elaboration of the regular accounting records. Furthermore, in much of the statistical work the data must check with the official figures of the accounting department and the **close association of the two organizations** facilitates co-operation along this line. An advantage may, likewise, be realized through co-operation in the use of mechanical aids.

CENTRALIZED VERSUS DECENTRALIZED STATISTICAL ORGANIZATION.—The statistical organization may be centralized or decentralized in form. In the one case, (1) the chief statistician is immediately and directly in charge of the complete program of statistics, (2) the entire statistical force is centralized under his direct supervision, and (3) a comprehensive system of primary basic data records is maintained in the statistical organization. (See Fig. 44.) In the other, (1) the chief statistician only remotely and indirectly supervises the statistical work, (2) only a supervising nucleus of the statistical force is located in his office, the bulk of the force being distributed among the several departments of the company in the form of operating units which are under the direct supervision of their respective departments, and (3) primary basic data records are to be found for the most part only in the several departments of the company with or without special organization or systematization to facilitate statistical work. (See Fig. 45.)

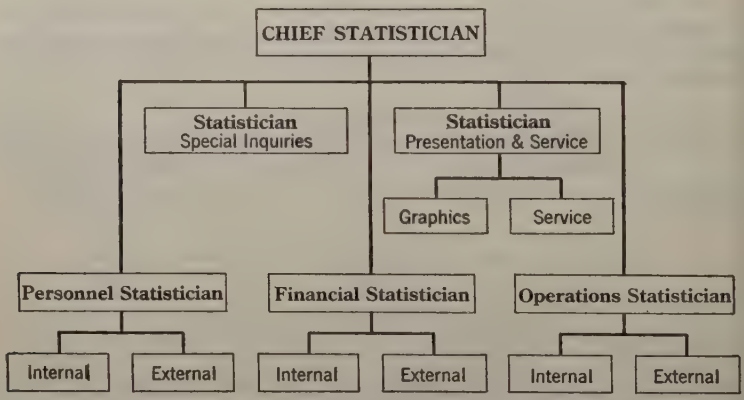

FIG. 44. An Organization Chart Representing the Centralized Type of Statistical Organization

With an executive statistician at the head and staff statisticians in charge of personnel, financial, and operations statistics, special inquiries, and presentation and service.

Which of these forms of organization is preferable will depend to some extent on the organizational character of the particular establishment that the program of statistics is designed to serve. Frequently, the policy of the business is one of decentralization and this may at times be a controlling factor in determining whether the statistical work shall be centralized or decentralized. There are, however, certain fundamental considerations which play an important part in deciding the type of organization. The business concern may be a simple organization as in the case of most smaller companies, or it may be made up of a number of associated companies as in the case of some of the larger American corporations. Furthermore, all the operations and employees of the concern may be grouped together under one roof or in one locality, or through branches or geographical divisions they may be scattered over a wide territory with the several parts of the organization widely separated over the country or even over the world. Where the business organization is widely

separated it is imperative that the statistical work be likewise decentralized. The question of the comparative value of the centralized and decentralized type of statistical organization has to do specifically with the simpler type of organization where the operations and forces are concentrated at least in one locality.

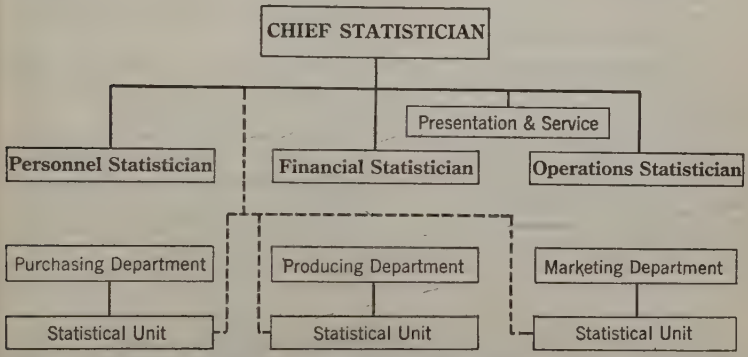

FIG. 45. Organization Chart Suggesting the General Form of the Decentralized Type of Statistical Organization

THE CENTRALIZED ORGANIZATION.—The following points are generally noted to indicate that the centralized organization is preferable:

1. Accuracy.—The centralized statistical organization is better prepared to guarantee accurate results since it keeps under the immediate supervision of the head of the statistical organization the entire work of developing statistical statements, from the primary basic records to the completed study.

2. Relieves the Departments.—The centralized statistical organization conforms to, and the decentralized statistical organization conflicts with, the principle of management which prescribes that the operating department of a business organization should be relieved of all burdens of the business except those associated directly with operations.

3. Statistics a Main Job.—When the statistical work is centralized the entire development is under the immediate supervision of the chief statistician and his staff, whose chief function in the company is to do statistical work. When this statistical work is done in the several operating departments—when it is decentralized—the supervision is done by those whose main jobs are not statistical compilations but operating work. The immediate supervision of the chief statistician is far preferable. This is his main interest. He studies statistics and equips himself to do the best kind of work in this field.

4. Uniformity.—A centralized statistical department insures uniformity of treatment both in the organization of the work and in its detailed development.

5. Avoids Duplication.—The centralized statistical organization tends to avoid duplication both of effort and working force.

6. Mechanical Aids.—In the larger industrial organizations, where the use of the tabulating machine is required, the centralization of primary basic

records is next to imperative. The waste in time and energy involved in the introduction of the tabulating machine in a decentralized organization is avoided.

7. Comparative Departmental Figures.—One of the widest fields of service in the development of statistical data lies in serving the general officers with comparative departmental figures. When these figures are prepared separately by the several departments there is no assurance that the treatment of details will be identical and the final figures comparable.

THE DECENTRALIZED ORGANIZATION.—On the other hand, the decentralized organization offers certain **advantages** which frequently outweigh all of those listed above in favor of the centralized concept.

1. Service to Department Heads.—It is important for the heads of departments to be familiar with the facts of their respective departments as well as for the general executives to have the facts of the company. The decentralized statistical organization affords a better opportunity to serve the department heads than does the centralized type. If the operating department is responsible for organizing and analyzing the facts of its own organization it will be more familiar with the facts and hence be better able to draw conclusions therefrom and establish policies and practices in accordance therewith.

2. Eliminates Duplication of Records.—A further advantage of the decentralized type is that it tends to eliminate the duplication of records which is required in the centralized organization. The operating departments must have their records for purposes of operations and the maintenance of a second set in the statistical department is definite duplication. The elimination of this may result in a substantial economy.

3. Statistical Department Unfamiliar With the Facts.—In the centralized type of organization the figures are worked up entirely by the statistical organization without the inspection of the department or division heads. These figures presented to the executives may give the impression that something is seriously wrong and may lead to a request for an explanation from the department or division head.

PRACTICAL FORM OF ORGANIZATION.—From the practical standpoint, satisfactory statistical service can be rendered through either type of organization. In strict theory, the centralized type is perhaps preferable but rarely if ever in practical business affairs can decisions be made on a strictly theoretical basis. In nearly every question of management that arises there are important practical considerations and the formulation of a statistical organization is no exception. As a matter of fact, in practical work there is generally **a combination of the centralized and decentralized type. External basic data** generally and such internal basic data as are centrally recorded—perhaps payroll, labor turnover, sales or financial facts—as well as all company statements and departmental comparisons will be handled by the central organization. Other data, particularly **detailed operations facts** related specifically to the several departments, may be handled separately by the respective departments. The facts which are worked up by the departments are then generally reported to the statistical organization, not in their original detail, but in a more or less classified and summarized form, from which company and comparative departmental figures may be prepared. What basic data will be maintained in the statistical organization and what in the other departments of the company will have to be decided in the light of the facts of the particular situation, the practical aspects of which will usually be the determining factors.

The statistical organization should be in the form that will best serve the particular company and it is unfortunate indeed for the practical statistician to undertake abruptly to bend the form of the statistical organization to suit some theoretical standard rather than to have it fit in with the organization and practices of the company. Figures 44 and 45 illustrate the general forms of the two different types of organizations but these are merely suggestions to aid as a guide in the development of the organization and are in no sense set down as the only forms of successful statistical organization. It must always be borne in mind that the statistical organization in a practical business concern may be of any form and size. It may be a single unit in the accounting department; it may be made up of several units in the different operating departments; or the statistical work may be done incidentally by the regular operating organization. The last method is in operation for certain classes of data in practically every concern and it is the preferable way of handling the statistics which are specifically applicable to the operation of a single department.

THE PERSONNEL.—The selection of proper personnel is one of the most important considerations in the development of a program of statistics. The organization charts in Figs. 44 and 45 suggest in general the type of personnel required. From these charts it will be observed that the following broad types of employees are required:

1. Executive statisticians
2. Staff statisticians
3. Expert statisticians and technicians
4. Statistical clerks

The Executive Statistician.—The executive statistician is the one whose chief responsibility is the **executive direction of the statistical organization.** The following are among his principal **qualifications:**

1. Administrative Ability
2. An Appreciation of the Services of Statistics
3. Disciplined Imagination
4. Familiarity With the Business
5. Statistical Technique
6. Practical Minded

The Staff Statistician.—The staff statistician may be designated as an **assistant to the executive statistician,** who is immediately in charge of the development of the statistical work in whole or in part. In the organization charts, Figs. 44 and 45 above, provision has been made for staff statisticians in charge of personnel statistics, financial statistics, operations statistics, special inquiries, and presentation and service.

Statistical Experts.—These are employes who are specially **equipped in the technique and philosophy of statistical method.** The personnel, financial, operations, and graphic staff statisticians all will have assistants who are specialists each in his own field. These experts will give their entire time exclusively to the study of problems in their respective fields and will thereby give to the staff statisticians expert advice in the various phases of the statistical program. The **chief qualifications** of the statistical expert are: (1) familiarity with the statistical methods required in the organization, analysis, and interpretation of the type of data for which he is responsible, and (2) a thorough knowledge of the important facts in his special field.

Statistical Clerks.—This classification will include the office force of all classes: stenographers, typists, machine operators, draftsmen, and all kinds of

clerks. While the selection of this class of employes is not generally so difficult as is the case with the executive and staff statistician, nevertheless it is highly important that they be carefully selected in the light of the special type of service they are to render.

APPLIANCES.—The element of cost enters into the statistical department to the same degree as in any of the other departments of the organization. To justify themselves, statistics must be produced at a minimum cost—a cost which will repay their existence. When methods of tabulation are too laborious, there is a tendency for errors to creep in despite the utmost care. The **use of mechanical devices** often reduces costs and minimizes the probability of error. Among the most widely used appliances for this purpose may be mentioned the **Hollerith Card Sorting Machine,** which is suitable for statistical work relating to sales, costs, etc., and the **Hollerith Tabulating Machine** for totaling the data contained upon the cards. Both of these machines are very flexible in their nature and are readily adaptable to any situation in which the statistics are entered upon cards. The United States Bureau of Census has made wide application of these two machines very advantageously.

Calculating machines while not specifically designed for statistical work are ordinarily part of the equipment of every such department. Special equipment for containing the completed statistics and presenting the same to the best possible advantage is rapidly finding favor. Such equipment includes swinging leaf display fixtures for displaying maps, charts, etc., large wall maps, map cabinets, devices using colored pins and mechanical bar charts. Many devices of similar character, each having advantages and disadvantages, might be enumerated. Problems of the statistical department will repay careful study, to the end that wherever volume of data handled and probable reduced costs point the way, the executive may consider the installation of such labor saving equipment as seems best suited for his particular problem.

SECTION 30

CONTROLLING SALES AND SALES EXPENSE

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SECTION 30

CONTROLLING SALES AND SALES EXPENSE

The predetermination of profits and costs on the basis of budgeted sales is the most effective means of securing profitable operation. For each major and minor department **standards of performance** should be set up, so that against these standards actual performance can be checked periodically.

Principles and Procedure of Determining Flexible Budgets

FLEXIBLE STANDARDS.—To establish departmental standards of performance, it is necessary to determine some form of expression of results suitable alike for all subdivisions of the business, and at the same time flexible enough to enable the setting of standards which can be readily adjusted to the changing conditions of industry. Hence it is at the outset necessary—

1. To discuss the preparation of the sales budget in its relation to enterprise as a whole.
2. To explain the determination of flexible standards for indicating the results of each department or organization unit under varying conditions of industry.

In other words, the standards should be flexible as business is ever changing and no two years are exactly alike. Consequently the amount of sales will also vary from year to year. Then, too, most industries are seasonal, and also, the amount of business done in particular seasons is likely to vary on account of weather conditions, good or poor crops, business depressions, etc. To manage a business effectively it is necessary to know costs from week to week and month to month with reference to sales in order to see how the organization will come out at the end of the year. Standards which reflect conditions in this way will help the management to attain a certain amount of profit during a given period.

THE SALES BUDGET.—The basis for all forecasts and estimates is the volume of sales expected, since sales is the source of the operating income. It would thus seem that the sales estimate should be the first budget to be made up. However, the best program for the organization as a whole contemplates close co-ordination of the activities of all the departments of the company, and in some cases it may be necessary or expedient at least to consider the production or finance department first. In most instances the initial step in the budgetary program is made by the sales department. The sales organization is more closely in touch with the marketing conditions than any of the other departments. On account of changing marketing conditions and the producing facilities of the individual concern a well-balanced sales program requires much careful planning. A detailed discussion of the procedure of determining the sales quota or budget is given later. There are, however, certain general

aspects pertaining to the volume of business that need to be understood in connection with the sales quota.

THE VOLUME OF SALES.—Having decided that the budget program should begin with the sales budget, the **first problem** to be solved is the volume of sales to be budgeted for the next year or budget period. The solution of this problem depends on several major considerations. First, it must be recognized that volume of sales is dependent upon the **amount of money spent in sales effort** to secure sales. By increasing the advertising budget and the number of salesmen in the field, the sales will increase; so will the expense. A sales program cannot be considered without taking cognizance of the cost in the way of selling expense, i.e., how much the company wishes to spend during a given period for sales effort. Secondly, the sales program should be carefully considered in relation to the **production facilities** of the plant. A majority of the industrial plants under normal conditions have surplus producing capacity and hence a relatively large amount of fixed expense. As the volume of sales is increased the unit cost of production decreases, because the **overhead** is distributed over a larger number of units of products. Under such conditions careful estimating of costs is necessary in order to bring sales and production into proper co-ordination and adjustment. Theoretically, the goal toward which to work from the point of view of profit would be to secure that volume of sales which would yield the greatest net return on the capital invested consistent with the growth of the business and the policy of expansion. So, in making up the sales estimate for the budget period, among other things, the following points should be given careful consideration:

1. The fixed and variable expense of the concern.
2. The "profit-point."
3. Selling prices of individual commodities or classes.

FIXED AND VARIABLE COSTS.—An expense in connection with operating a business is an outlay of capital, either for goods or for services. In cost accounting the outlays for materials and direct labor, as incurred in manufacturing industries, are usually spoken of as "costs" while the expenditures for supplies and indirect labor are called "expenses." For the purpose of this discussion "expense" and "cost" will be used synonymously.

In conducting a business various expenditures need to be incurred. Some are necessary whether the plant is operating or idle. Other items of cost vary in proportion to the operations whether they be manufacturing or selling. There is a third group which is fixed to a certain extent but also varies somewhat with the output. From the standpoint of regularity of occurrence costs may be classified as follows:

1. Fixed or capacity expenses
2. Partially variable expenses
3. Variable expenses

Insurance, rent, taxes, the president's salary, bonded indebtedness, etc., are illustrations of **fixed expense.** Among the **partially variable expenses** are such items of cost as depreciation on machinery, equipment, automobiles, etc. A certain decline or lessening in value will take place in this type of assets regardless of whether or not the plant is in operation. The rate of depreciation, however, will be greatly accelerated with regard to some assets when the plant is operated to capacity. Among the **variable cost items** which vary directly with output are direct labor, cost of materials, etc.

A classification of costs as given above is very helpful in analyzing operating problems and in obtaining unit costs. However, for the purpose of making

flexible budgets of cost standards on volume of business as will be explained later, it is important to consider costs under two headings: Fixed, and variable. As used here these two classes of costs may be defined by the following extract quoted from "A Technique for the Chief Executive," by John H. Williams, Bulletin of the Taylor Society:

"**Fixed cost** is that part of cost which exists irrespective of fluctuations in volume of business within a range of the smallest volume of business which there is reasonable probability of doing up to the practical capacity of the plant. In it are included such items as: rent, depreciation; salary of executives, and a minimum number of accountants and clerks; payroll for shop superintendents, foremen, watchmen, etc.; property and corporation taxes; interest on funded debt; etc. It should represent only such items and parts of items as are regarded as essential to the conduct of the business at the established minimum volume and are independent of fluctuation because of increase or decrease in volume of business.

"**Variable cost** is that part of cost which should vary in proportion to the volume of business. It comprises such items as: materials; direct wages; supplies; upkeep; salary of minor executives, accountants and clerks; payroll of assistant shop superintendents, foremen, etc., income taxes; interest on floating debt; stock dividends; etc. It should represent only such items and parts of items as are not essential to the functioning of the business on the basis of the established minimum."

It should be evident from the above definitions and illustrations of fixed and variable costs that the basis for this classification is not so much a distinction between such items as interest on bonded indebtedness representing a fixed cost, and material, direct labor, etc., representing a variable cost, as it is a division of the various items of expenditures. For example, a portion of the office salaries and the salesmen's expenses is fixed, while part of it is variable and should vary with the amount of business secured. Many other expenditures belong in the same category.

Even in a period of very dull business there are certain expenditures connected with manufacturing, administration, and selling that must go on no matter how small and few the orders are. Only by selling the business can these expenditures be eliminated. When such a step is not taken, the plant equipment must be preserved against excessive deterioration. A skeleton organization at the plant as well as in the selling and administrative divisions must be maintained. In every business there are certain fixed costs which fluctuate very little whether volume of sales is $700,000 or $12,000,000. In the fixed cost is included such items as administrative salaries, bonded indebtedness, office expenses, and the fixed selling expenses, such as the salaries of the sales department, and the advertising expenses necessary to keep the product known. Among the fixed costs are also included a portion of the indirect payroll of the factory comprising the salary of the superintendent, and of the foremen whose services are needed regardless of the volume of goods produced. There are, in addition, the stock clerks in the production departments, tool-room keepers, checkers, inspectors, etc. Certain other items of fixed expense are insurance, taxes, rental of telephone, depreciation, etc. All these items of costs go on regardless of the volume of sales. Thus a certain portion of the expenditures in all departments is fixed while a portion is variable.

THE "PROFIT-POINT."—Because of the fixed costs a certain **minimum amount of business** must be done until the "profit-point" is reached. Any amount below that results in a loss, while every dollar's worth of sales above that figure yields a profit. The **"profit-point" volume of sales** is that volume

of business which results in neither a profit nor a loss, i.e., the business "breaks even." If the variable cost as defined above varies with the volume of business but is always the same per cent, while the fixed cost remains the same irrespective of fluctuations in volume of business, the difference between the variable cost and 100% as representing the business done, may be regarded as contribution to fixed cost or profit. Stating this in another way, if the total variable cost for example is 80%, or $.80 of each $1 of sales, 20%, or $.20 out of each $1.00 worth of sales, is available for paying off fixed cost until it is completely offset, and thereafter this margin is profit.

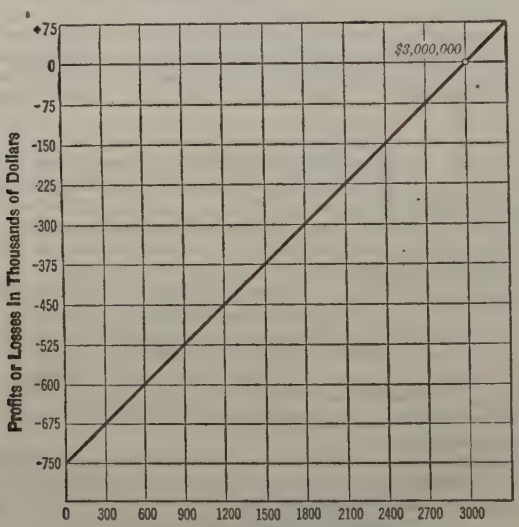

Fig. 1. Profit-Point Chart

Illustration: Suppose fixed costs of manufacturing, selling and administration in a certain concern are $750,000 per annum and the per cent of the total variable cost amounts to about 75% of the sales. How much business must be done before the "profit-point" is reached? Under these conditions every dollar's worth of sales yields a margin of $.25, a contribution to fixed costs and profit. It will require as many dollars' worth of sales to reach the "profit-point" as $.25 is contained into $750,000 which is $3,000,000; that is, $3,000,000 is the "profit-point." Fig. 1 shows graphically the profit and loss resulting from various volumes of sales.

"PROFIT-POINT" ILLUSTRATED.—The relation of fixed to variable cost depends to a large degree on the capacity of an establishment with reference to the amount of business that it can get to keep its departments busy. For example, take two companies, A and B, in the same industry, manufacturing and selling the same type of goods. Company A can manufacture and market $2,000,000 worth of goods per month, but on account of a decrease in demand it sells only $1,000,000 per month. B has the capacity to produce and sell

$1,000,000 per month but only does $900,000 of business per month. The plant capacity of A is larger than is necessary for its present needs, and therefore, it has a great deal of idle equipment and other fixed charges which go to make up a higher fixed cost of doing its volume of business. On the other hand, B's plant is just slightly larger than is necessary for its current volume of business. Obviously, the breaking or "profit-point" of the two establishments will involve different amounts of business. If the fixed cost in plant A is $270,000 and its variable cost 70%, or $.70 of every dollar of sales, while plant B has a fixed cost of $120,000 and a variable cost of 80%, or $.80 of each dollar of business done, how much business must be done by each plant to "break even"? To determine the "profit-point" for company A at which there will be neither gain nor loss, $.30 is divided into $270,000 which gives $900,000 per month as the "profit-point." That of B is similarly obtained by dividing $120,000 by $.20, which equals $600,000.

To ascertain how much profit each concern yields if the fixed and per cent of variable cost is as stated above and the volume of sales per month for each concern is $1,000,000 and $900,000 respectively, the computation is as follows:

Company A:	Variable cost, 70% of $1,000,000	$700,000
	Fixed cost	270,000
	Total cost	$970,000
	$1,000,000 minus $970,000 equals $30,000 net profit.	
Company B:	Variable cost, 80% of $900,000	$720,000
	Fixed cost	120,000
	Total cost	$840,000
	$900,000 minus $840,000 equals $60,000 net profit.	

Carrying the illustration still further, suppose company B continues to sell to the amount of $900,000 per month, but its fixed cost is reduced from $120,000 to $80,000, how much business will it find necessary to do to break even? Assuming the same variable cost as given in the illustration above, and applying the same procedure as before, the answer is $400,000 per month ($80,000 divided by $.20 equals $400,000). Again, suppose the fixed cost remains unchanged but the variable cost is reduced from $.80 on each dollar of sales to $.70, where will the breaking point be? If the variable cost is $.70 on every dollar's worth of business obtained, $.30 on each dollar of business will be applicable to the fixed cost. Consequently, by dividing $120,000 by $.30 we get $400,000 per month as the answer. Going back to the first illustration of company B, when the "profit-point" was $600,000 of sales per month, its loss in case the sales dropped to $450,000 per month is determined as follows:

The fixed cost is	$120,000
Variable cost 80% of $450,000	360,000
Total cost	$480,000
Sales	450,000
Loss	$ 30,000

These illustrations show the significance of—

1. Obtaining a certain volume of sales.
2. Predetermining the possible volume of sales through the various sales outlets together with an estimate of the cost of selling.
3. Having the chief executive, the sales manager and the controller get together and figure out what the real possibilities of profits from the business are, and then make plans to realize as nearly as possible the profit-making capacity of the concern.

SALES VOLUME AND SELLING PRICES.—Usually the volume of sales can be increased in two ways:

1. By reducing the price of the merchandise sold.
2. By increasing the normal sales effort through advertising, salesmen in the field, etc.

When the volume of sales is increased, the **unit cost of production** will decrease until the point is reached where it is necessary to make plant extensions. Hence, by increasing the volume of sales up to that point, lower production costs will result. On the other hand, sales expenses as volume of business is increased have in normal times a tendency to increase. To overcome competition more money must be spent for advertising and personal solicitation by salesmen.

The point to be emphasized here is that **production costs and sales costs** do not move together. Nevertheless, a certain portion of the selling costs in every business will go on whether the orders are few or many. There is a certain amount of advertising expense which is incurred irrespective of the amount of business done. A company operating branches also has other fixed charges in the form of rent, interest, salaries of sales executives, and minimum salaries of branch managers and salesmen. The **proportion of the fixed cost to the variable cost in selling operations,** however, is far less than in plant operations. Consequently the "profit-point" with reference to the amount of business done comes much earlier in selling operations than in production.

SALES ESTIMATE IN RELATION TO PRODUCTION CAPACITY.—Not infrequently sales managers, in particular, are not aware of the effect of volume on both the production and selling cost and the necessity of keeping up a volume of sufficient size to take care of the fixed costs. It is highly important therefore to have the accountant or comptroller prepare an estimate of the volume of sales indicating the amount necessary—

1. To "break even."
2. To earn a reasonable return on the capital invested.

For example, an estimate should be made indicating what the net profit on the investment would be for different amounts of sales not only through the regular channels but through all possible sales outlets, and what the estimated net returns would be if the plant were operated at or nearly full capacity. Such calculations, among other things, comprehend not only careful estimates of production, selling and administration costs but of price policies.

In preparing a sales estimate for a company as illustrated in Fig. 1 sales can be profitably solicited, after the $3,000,000 volume is reached, at less than the regular sales prices **by disregarding the fixed charges.** Obviously every dollar's worth sold after the "profit-point" has been reached yields a good margin of profit as no overhead charges need to be considered. It might be argued that it would not be practicable to sell a portion of the output at a different price, particularly in the case of those concerns making but one line, such as adding machines, cash registers, and harvesting machines. However, some organizations get around this objection by selling a portion of their output in foreign countries at a lower price than in the domestic market. Others which make a varied line of products, sell the major portion of their output through their own sales organization under their trade name, and market the balance unbranded to large outlets as mail order houses, department stores, or other large distributors. In this way it is also possible to dispose of some goods which may be off-grade without affecting their regular trade-marked products. This practice is common in industries such as automobile accessories, packing, and rubber tire and footwear.

With estimates as a basis, the sales manager can be shown what volume of sales in each of the lines is necessary to earn a **normal profit** and the amount needed to "break even." This can be further illustrated by means of charts prepared at the end of the budget period giving the following data:

1. The sales quota or estimated volume of sales.
2. The amount necessary to "break even" (if that is possible under the conditions of operation).
3. The actual sales volume.

Such information would be very helpful to executives in planning their policies. There may be certain units, i.e., separate plants as are found in large organizations, which because of their heavy fixed charges cannot do enough business to "break even." It is nevertheless important to know under what conditions they might be made profitable.

PRICING OF COMMODITIES IN SALES BUDGETS.—Not only need the effect of increasing sales volume through increasing sales effort be carefully considered in connection with production costs, but the question of **prices on individual commodities, or classes of goods,** also warrants careful consideration. While it is desirable that a profit should be obtained from the sale of each item and that those articles which do not yield a satisfactory profit be discontinued, for various reasons this cannot always be done. Under modern competitive conditions it is not always practicable to base unit sales prices upon unit cost of producing them, as is generally supposed. In the better managed concerns costs are seldom considered until a **logical sales price** has been determined. In making up the schedule of the selling prices of the various articles a concern has to consider the prices charged by other concerns for similar products and also the prices for those goods which may be substituted. For example, a manufacturer of rubber goods and footwear of all types would in fixing a selling price for rubbers have to consider the price charged by other companies which also produce rubbers, rather than figure first the cost of manufacturing this product and then determine the selling price. One company usually can produce some commodities at a lower figure than competing concerns, and vice versa. The principal consideration in setting unit selling prices is to produce the **most favorable aggregate result.** Certain articles may be sold at cost or even at a loss, as a leader to meet certain competition, or to keep the plant going, or for other reasons. For example, sometimes it is necessary on account of competitive conditions to sell certain items in order to meet the sales demand for a complete line of articles. For instance, in the sale of valves, dealers find it necessary to carry several sizes in order to meet the demands of their customers. Some manufacturers produce all these sizes so that other manufacturers, in order to meet the demands of dealers, may be required to carry a complete line for fear the dealer will place his order with the manufacturer from whom he can obtain a complete line. That a complete line may be maintained, it may be necessary for the manufacturer to produce certain sizes which he is unable to produce and sell at competitive prices without incurring a loss.

In considering the profit of the sales estimate, the **problem of providing complete lines** in certain industries should be given careful consideration in order that certain items will not be eliminated so as to affect the sales volume adversely. Notwithstanding, there has been a tendency in business in the past of giving too much attention to the complete-line idea. Considerable attention was given to the standardization of items during the war and after the close of the war. This is exceedingly important, as great economy can be

effected by simplification of products. In the average industry the following steps are suggested for making up **price schedules** of products:

"1. List all of the articles.
2. Determine the articles with which these will compete, and head up a column for each of the principal competitors.
3. Fill in the price at which these competitive articles are sold.
4. Determine and fill in the price, under the circumstance of your sales campaign, at which you believe you can produce the desired volume of sales.
5. Put down your own unit cost.
6. Review all of the facts and make such unit prices as you believe necessary to the end of producing the most favorable aggregate result." ("Technique for the Chief Executive," by John H. Williams, Bulletin of the Taylor Society, April 1922.)

After the most profitable sales program from the standpoint of **aggregate net profit** has been determined consideration should be given to the varying margin of profit on different lines or classes of products when making up the salesman's quota, and the sales compensation system should be so planned that it will be to the interest of the salesman to put his selling effort on the more profitable lines.

RECORDS IN TERMS OF LIST PRICE.—As prices fluctuate, in many lines it frequently is necessary to sell at a different price than the anticipated sales price at the time the budget was made. Accordingly, it is customary for manufacturers and wholesale dealers in making up their catalogue for the trade to enter the commodities at a "list price." Depending upon the sales policy of the individual business, this may or may not be the selling price all dealers pay. Usually it is the basis on which sales prices are based. Any deduction from the listed figures is a trade discount.

Trade discounts are rarely recorded on the books; only the net sales price is credited to the sales account. Under conditions prevailing in many businesses this may give satisfactory control over sales activities. There are, however, advantages from the standpoint of establishing standards of control of each organization or department, in keeping the books in terms of list price and in recording the selling or trade discount as a selling expense. This is done as follows: On the basis of the sales estimate or quota expressed in units of product and list selling price, i.e., the price at which each is to be sold to dealers or consumers, each organization unit in each department computes the cost of operating as a certain per cent of the list price. Starting with the production division, take an item, A, having a list price of $1 and determine what per cent of its price will be taken up in manufacturing. Assume that 50% will be absorbed in producing it. In the same way, each organization unit estimates its cost of operation for handling the products. When the budget is completed the per cent of the sales price at list necessary to operate each organization unit will have been determined, and this will serve as a standard against which actual performance can be measured.

How this procedure will aid **sales control** will be seen from the following. In the first place, discounts allowed, to a certain extent, may measure the efficiency of a branch manager. The sales manager who is able to make his quota with the smallest amount of sales discount, other sales conditions being equal, is naturally the most efficient manager. Consequently, there should be a record of the amount of trade discount taken by each branch manager. It might be argued that when concerns bill their goods to their branches at list,

as is the custom in some organizations, the prices are fixed by the head office so that the branch manager has no discretion over prices. However, even when this is the practice the local manager is usually given some leeway in the matter of prices, particularly with regard to selling to the larger dealers or customers. That is to say, the manager can within certain limits give a discount from the regular selling price. Secondly, when a concern distributes its products through various channels, as through its own branches, jobbers, agents, brokers, etc., the recording of sales uniformly at list and the discount from the list as a selling cost, the per cent of selling expenses to sales under these different methods of distribution is comparable. This is not possible when sales are recorded at their net price. For example, suppose the net sales prices are recorded and 10% is allowed on the goods billed to a company's own branches because it bears the branch cost, and 15% is given to jobbers because they finance themselves. The net results under these conditions are misleading. For convenience in keeping record and in simplifying calculations, the list price should approximate the price the retail dealer is expected to pay for normal quantities purchased.

STANDARD COST IN TERMS OF FIXED AND VARIABLE COST FOR OPERATING EACH ORGANIZATION UNIT.—To understand the procedure for determining the amount of fixed cost and the per cent variable when making up the master or general budget at the beginning of the budget period, the **functional organization** of the company should be studied. Some of the units in the organization are directly responsible to the chief executive while others are responsible to intermediate executives. For example, the sales or distribution division of the business is organized into a number of units, each having a definite function. One unit is responsible for the sale of products to the jobbers, while another supervises the sales to the company's own branches, and so on down the list. On the basis of volume of business each organization unit sets up a **budget of expenses.** A certain amount of expense in each unit is fixed and goes on regardless of the amount of business done. A portion of the cost varies with the volume of business done. In order to exercise effective control both of these costs should be definitely predetermined according to some measuring unit, so that the chief executive as well as every other subordinate executive will have a standard against which to measure performance. By combining the fixed cost and per cent of variable cost of each organization unit the volume necessary to reach the "profit-point" can be easily determined. This is exceedingly important in connection with the establishment of price policies and methods of distribution. The procedure involves:

1. The setting up of a **minimum and a maximum dollar volume of sales** for the budget period; the minimum volume of business being the smallest amount of sales which there is any reasonable probability of making, while the maximum volume is the practical capacity of the plant, i.e., the amount that can be produced without any extended additions or betterments to the plant.

2. The determination of the **prime fixed cost and the per cent of variable cost** by the use of a formula. The function of the formula is to determine the dividing line between the fixed and the variable cost as previously defined. In other words, it is to show with reasonable accuracy the amount of fixed expense and the per cent variable in each organization unit.

There are four facts to be considered in the formula:

1. The maximum volume of business, represented by A.
2. The minimum volume of business, represented by B.

3. The necessary expense for the maximum volume, represented by C.
4. The expense necessary for the minimum volume, represented by D.

Let X represent the per cent of variable cost, which times the volume of sales plus the prime fixed cost equals the proper cost for the volume of sales budgeted. Let Y equal the prime fixed cost. Working this out by algebra, the formula is derived:

$$X = \frac{C - D}{A - B}$$

Y is the same for each and every volume.

$Y = C - AX$, which should equal the same thing, $Y = D - BX$.

EXPENSE FORMULA ILLUSTRATED.—As an illustration of how the fixed and variable expense is actually determined in any one of the organization units of a particular enterprise, take an organization unit selling commodity A to jobbers. In Fig. 2 is shown a method of determining the fixed and variable cost of one of the sales units in charge of a manager who supervises salesmen who

ORGANIZATION UNIT: Manager Commodity A to Jobbers.

LEDGER ACCOUNT: Manager Commodity A to Jobbers.

SCOPE OF EXPENDITURE: Supervision and Direction of Sales Commodity A.

BASIS MINIMUM SALES AT LIST: $5,600,000. MAXIMUM SALES TO JOBBERS AT LIST: $11,200,000.

STANDARD: FIXED COST PER MONTH: $8,333. VARIABLE COST: 11.50 per cent of SALES AT LIST.

	Cost for Minimum Sales	Cost for Maximum Sales
Jobber's Discount....10%	$560,000	$1,120,000
Bad Debts....0.1%	5,600	11,200
Rebates and Allowances....0.1%	5,600	11,200
1 Manager	8,000	8,000
2 Territorial Supervisors	10,000	10,000
3 Secretaries	5,000	5,000
4–8 Clerks	7,000	14,000
1–2 Boys	500	1,000
7–10 Salesmen	35,000	50,000
Office Supplies—Stores	1,000	1,500
Office Supplies—Special	1,800	2,400
Jobber Sales Literature	24,000	30,500
Postage	2,000	2,500
Telegraph	1,500	2,000
Sales Travel	17,000	21,800
Executive Travel	4,000	4,000
Sales Bonuses	19,000	41,600
Executive Bonuses	13,500	27,000
Miscellaneous	3,500	4,300
	$724,000	$1,368,000

FIG. 2. Organization Unit Selling to Jobbers
(Adapted from chart by J. H. Williams)

sell to jobbers. It should be noted that inasmuch as the company sells through other channels as well, only part of the total sales are considered in this particular selling unit. There are many concerns, however, which sell entirely to jobbers through salesmen who travel away from the home office. Under such organization the sales organization unit selling to jobbers would constitute the entire sales organization, at the head of which would be the general sales manager. However, when the sales organization is divided into different units as in the company illustrated in Fig. 2, the basis for establishing the **operating standards of each sales unit,** i.e., fixed and variable expense, is the minimum and maximum volume expected of each individual unit making up the entire sales organization. For all the other organization units as stated above, the basis of all expense estimates or standards is the minimum and maximum volume of the business as a whole.

Assume that the total minimum and maximum volume of the concern represented is $12,000,000 and $24,000,000 respectively as shown in Fig. 3, and that the minimum and maximum volume of the organization unit selling commodity A to jobbers as shown in Fig. 2 is $5,600,000 and $11,200,000. Assuming that the cost of handling this minimum and maximum volume is $724,000 and $1,368,000, what is the fixed cost and what is the per cent of variable in this organization unit?

According to the formula explained above $\frac{C-D}{A-B}$ = per cent variable. By subtracting the per cent variable from 100% of the business done, the fixed cost is obtained.

A	$11,200,000	*C*	$ 1,368,000
B	5,600,000	*D*	724,000

The difference between the maximum and the minimum volume of sales is $5,600,000, while the difference in the cost of operating the two volumes of business is $644,000. By dividing the difference in the cost for conducting each volume by the variation in sales the result is a variable cost of 11.5% of the sales.

	Sales	Cost
Maximum	$11,200,000	$1,368,000
Minimum	5,600,000	724,000
Difference	$ 5,600,000	$ 644,000

Since the variable cost is 11.5% of the sales price at list, the fixed cost can be determined by taking 11.5% from either minimum or maximum sales, and then deducting it from the total cost as follows:

	Minimum	Maximum
Sales	$5,600,000	$11,200,000
Per cent variable cost	.115	.115
Amount of variable cost	$ 644,000	$ 1,288,000
Total cost as indicated above	$ 724,000	$ 1,368,000
Variable cost	644,000	1,288,000
Fixed cost	$ 80,000	$ 80,000

The fixed cost for the year for this selling unit is $80,000 and dividing this by 12, the average fixed cost per month is found to be $6,666.66, while the variable cost is 11.5% of the volume of sales.

MINIMUM AND MAXIMUM VOLUME OF BUSINESS VS. THE SALES BUDGET.—The maximum and minimum volume of business used as the basis

	Range				Cost Standards		Per Cent Variable
	Minimum		Maximum		Fixed		
	Sales at List	Cost	Sales at List	Cost	Year	Month	
President & General Manager							
Purchasing							
Engineering							
Personnel							
Taxation							
Finance and Credits							
Accounting							
Auditing							
Management	12,000,000	2,600,000	24,000,000	3,200,000	2,000,000	166,666.66	5
Production							
Store Room							
Routing							
Maintenance							
Manufacturing Overhead	12,000,000	2,600,000	24,000,000	3,200,000	2,000,000	166,666.66	5
Materials	12,000,000	3,000,000	24,000,000	6,000,000	None	None	25
Direct Labor	12,000,000	2,400,000	24,000,000	4,800,000	None	None	20
Production Cost of Goods	12,000,000	8,000,000	24,000,000	14,000,000	2,000,000	166,666.66	50

Inventory Cost (Total manufacturing cost of commodities plus cost of management)					4,000,000	333,333.33	55
Distribution Expense: Advertising, Sales Promotion, General Sales Overhead	12,000,000	508,000	24,000,000	856,000	160,000	13,333.33	2.9
Cost of General Sales Supervision:							
Commodity A	7,400,000	15,200	14,800,000	22,400	8,000	666.66	.1
Commodity B	4,600,000	12,800	9,200,000	17,600	8,000	666.66	
Basic Sales Cost					4,176,000	348,000	58
Inventory Cost plus Cost of General Sales Organization							
Commodity A: Sales to Branch	1,600,000	392,000	3,200,000	616,000	168,000	14,000.00	14
Commodity A: Jobbers	5,600,000	724,000	11,200,000	1,368,000	80,000	6,666.66	11.5
Commodity A: Export	200,000	45,600	400,000	75,200	16,000	1,333.33	14.8
Commodity B: Sales to Branches	3,200,000	672,000	6,400,000	1,624,000	320,000	26,666.66	11
Commodity B: Jobbers	800,000	140,000	1,600,000	264,000	16,000	1,333.33	15.5
Commodity B: Export	600,000	90,400	1,200,000	156,800	24,000	2,000.00	14.07
Distribution Cost		2,600,000		4,400,000	800,000	66,666.68	15
TOTAL FOOTINGS	12,000,000	13,200,000	24,000,000	21,600,000	4,800,000	400,000	

FIG. 3. Operating Standards of Organization Units in a Hypothetical Company
(Adapted from a chart in "A Technique for the Chief Executive," by John H. Williams, Bulletin of the Taylor Society.)

for determining cost standards has nothing to do with the sales budget or quota for the ensuing period. Only in the case of a rare coincidence may the amount of the sales budget be the same amount as that represented in either the minimum or the maximum estimates. In the case of the organization unit selling to jobbers, for example, the sales budget may be any amount ranging between the minimum and the maximum estimate (i.e., from $5,600,000 to $11,200,000). The purpose of using two amounts is to determine the amount of fixed cost and the per cent variable in each organization unit for any given budget period. Assuming that these two quantities have been ascertained a measure or standard is *ipso facto* established with which future performance can be compared. Within this range the fixed cost and the per cent variable will remain constant for all practical purposes.

ACCURACY OF THE EXPENSE FORMULA.—It is not assumed that the variable cost as determined by the formula will be absolutely unvarying to the last dollar and cent. The variation will, however, be so slight that it may be disregarded for practical purposes, as absolute accuracy is not necessary for effective control. By examining the accounts appearing in the chart in Fig. 2, it will be found that in a great portion of the items, either the cost as expressed as a percentage of the sales, or the amount expressed in dollars and cents will remain constant regardless of the volume of business done. For example, the amounts of those items like jobbers' discounts, bad debts, rebates and allowances, etc., will vary, but the standard will not. Similarly, the salary of the manager and territorial supervisors are fixed costs, and will be the same for both volumes of business.

There are, however, other salary items in each organization unit which vary with the volume of business from the minimum to the maximum but not in direct ratio to the increase or decrease in sales. The office staff, for example, in the sales branch taking care of the correspondence and clerical functions, requires a minimum number of persons irrespective of the amount of business done. Up to a certain amount of business the help may be able to take care of the work. When the sales increase to a certain amount, the surplus help changes to a shortage and an additional helper is employed. With the additional clerk or stenographer probably an additional $50,000 or $75,000 of business can be done. At the very time the addition is made to the staff, the percentage of the cost expressed in terms of sales will be higher than at the later period when it becomes necessary to add further help to the staff. In a sizable organization unit the various items do not usually shift at the same time. Consequently, in actual practice the cost, as determined in the formula, will virtually remain constant, particularly if the manager in charge of the unit will watch the expenses closely.

FLEXIBLE OPERATING STANDARDS OF A HYPOTHETICAL COMPANY.—In Fig. 3 appear operating standards of all the organization units of a concern based on a minimum and a maximum volume of sales of $12,000,000 and $24,000,000 respectively. The cost of each organization unit has been determined similarly to the sales unit selling commodity to jobbers as outlined above. The total amount of fixed cost for the budget period is, as given in the 5th column, $4,800,000, while the entire variable cost is 70% of the sales. With these two standards established it is obvious that the "profit-point" for this business is $16,000,000. In other words, $16,000,000 of sales will be necessary before any profit will be forthcoming. Every $1 worth of business beyond that amount will yield a net revenue of 30% or $.30 on each dollar. As a means of control this procedure of computing flexible standards has particular merit, for

the cost of operating each department or organization unit of the entire business is computed separately. Having broken down each responsibility into definite units and having established a standard for each unit, the chief executive will be in a position to judge from the reports of each unit just how it is meeting its responsibility. For example, the last two columns in this table give the fixed and the per cent of variable cost of each organization unit based on the sales budget for the period, which may be a year in length as shown in the chart.

In reference to the sales control this method of setting up standards is especially effective. The fixed and per cent variable for the **inventory cost,** which includes total manufacturing cost and the cost of management, it will be noted, is $4,000,000, or 55%. Add to this amount the "general sales overhead and general sales supervision" of both commodities A and B, a basic fixed sales cost of $4,176,000 and a per cent variable of 58%. This includes the general cost of operating the sales organization which includes general advertising, sales promotion, general sales supervision, etc. Regardless of the channel through which the goods are marketed, whether jobbers, dealers, the company's own branches, or an export agency operated by the company, the basic fixed sales cost will be incurred. By recording the sales made through the various channels at list, and all deductions from list, i.e., sales discounts, as selling expense, the relative effectiveness of each method of selling can be definitely appraised.

Function of the Sales Budget

DEFINITION OF SALES QUOTA.—In every industry, there is an **industrial sales quota.** This industrial sales quota for any year is made up of the combined quotas of each individual producer belonging to that particular industry. The aggregate potential sales quota or sales possibilities of any particular industry cannot be definitely determined. It is variable, as its amount depends on the price at which the various products included in the industry are to be sold, and also on the amount each individual business deems proper to spend in sales effort. The industrial quota of any industry will vary from year to year according to general business conditions. Both the price and amount to be spent on sales campaigns will materially affect the amount that can be sold during any particular period.

In reference to the sales budget as it pertains to any individual producer in any industry there are two distinct quotas:

1. The budget sales quota
2. The potential sales quota

The **budget sales quota for an individual enterprise** is the estimated volume of sales expressed in units of products and in dollars which can be produced and financed. In other words, it is the estimated amount of business which the management, according to its policies, deems the most profitable or expedient to attain either for the current year or over a term of years. As one writer on sales quotas puts it: "It is an estimate of the sales, not an abstract calculation of what ought to be, nor what some time in the future may be. Today the sales quota is, in effect, a requisition for a certain volume of production in equal monthly lots."

On the other hand, the **potential sales quota** is the estimated amount of products that can be marketed providing the proper amount of selling expense is incurred. Obviously, the potential sales quota is a variable quantity, since its amount to a large extent depends on the amount of money to be spent for

sales effort. For example, any business can increase its sales by increasing its advertising appropriations and the number of salesmen in the field.

THE COMPANY SALES QUOTA.—The budget sales quota constitutes what is known as the sales budget or sales estimate for a definite cost period. In this discussion it will be called the **company quota.** This is the figure expressing the aggregate amount of business which a company sets up as its goal to achieve during a certain period, and for which production facilities and capital are provided. The company quota is made up of the sales quotas of the various selling units, as sales districts and salesmen's territories, as will be explained later. That is to say, it is the **total expectancy of the sales territories,** i.e., the volume of business each is expected to produce during the ensuing period. The budgeted quota may or may not be scientifically computed; it may just be a rough estimate of the amount of sales the sales manager and other officials of the company think they ought to set up as a goal for the next year.

The **sales records** of a company are the starting point for estimating future sales, since the amount of business during the current year is normally a fair expectancy of what can be secured during the following year. There are, however, various reasons, as will be pointed out later, why other factors must also be considered. A correct estimate of the company quota for any period presupposes a fair knowledge of the relative potential distribution possibilities of the company's products in its several sales districts. The procedure involved in determining it will be given in subsequent pages, while here there will be outlined the functions of quotas in relation to the sales and production activities.

CERTAIN TYPES OF SALES QUOTAS.—There are several types of sales quotas. A familiar form is the **salesman's quota** the chief purpose of which is to stimulate the men to greater effort. Under this plan the salesman usually sets his own sales estimate, and then attempts to attain it; or the sales manager, knowing the individual salesman's characteristics, may adjust the estimate to such a figure as he thinks will cause the salesman to work most effectively. The goal to be attained should be modified to suit the individual salesman's temperament, as some salesmen work most effectively when their goal set is just out of their reach, and others work best when they can show a wide margin of success beyond the task set for them. In some organizations performance is measured against some standard, such as the **potential sales quota.** The record attained by the best salesman or the best sales year is used as the goal and against this actual performance is compared.

These two types of sales quotas are common in many concerns. They are, however, inadequate and unscientific because the sales in any business do not move in a steady, continuous flow, nor even in a straight line of normal growth. There are good years and there are poor years and for that reason sales in excess of the previous years are not always possible. Sales quotas must, therefore, be based on composite factors.

SALES QUOTA IN RELATION TO THE BUSINESS AS A WHOLE.—The importance of the sales quota is usually associated with sales administration, where it is indispensable to efficient management. But its importance does not end there. The sales estimate or quota sets up a goal; it functions not only for the administration of the sales department, but for the entire organization. It is the objective, the goal towards which the entire business moves. On the basis of the predetermined amount of business to be secured, each department can make its plans and determine standards accordingly. The

sales estimate is the foundation of a budget system. By it the fixed expense and the per cent variable for the entire business can be determined.

To secure the best results each division of the business must be properly co-ordinated. Each department must know what the general plans for the budget period are, particularly in reference to the volume of business to be done. For example, the production department needs to know the amount and kind of goods the sales department expects to market in order to have them ready for shipment at the proper time. The personnel department needs to know the predetermined sales volume in order to provide for the proper number of workers. Similarly, the treasurer or other financial officer having charge of the financing of the purchases and other expenses of the business must know very definitely the cost of operating each organization unit so that the proper amount of working capital may be provided.

A carefully planned sales estimate as pointed out previously forms the basis for determining that volume of business which will yield the highest amount of profit on the investment. A certain amount of fixed charges exists in any business and therefore it is highly essential that the sales volume be expanded to such a figure as will yield the greatest amount of net profit. On the basis of the amount of goods which it is estimated can be sold, the **cost of manufacturing and the selling expense** can be predetermined. The difference between the estimated sales values and the factory and selling and administrative costs represents the forecasted profits. With the predetermined amount of sales and costs, the profit can be forecast for each month. Then, by furnishing an analysis of the variations from the estimated profits, by means of reports, the management of the business is in position to take immediate steps to eliminate, if possible, the profit losing conditions.

THE SALES QUOTA IN RELATION TO PRODUCTION.—A budget sales quota which can with reasonable certainty be expected to be realized plays a significant rôle in the production department. The predetermination of a definite amount of sales that can be secured when broken down into monthly or quarterly amounts, furnishes the factory manager a schedule upon which to base initial production plans. It also affords a basis for working out a schedule for the purchasing of raw material. Consequently, the factory is in a better position to lessen the usual seasonal variation in its production rates, and thus it tends to stabilize employment. Furthermore, the raw material and finished goods inventories can also be reduced.

SALES QUOTA A BASIS FOR SALES COMPENSATION.—One of the most important functions of sales quotas is found in connection with **salesmen's compensation plans.** The salesman is not under close supervision and his task is very different from that of the factory worker whose work is more closely supervised and who works mainly with machines. Ordinarily the salesman a large part of his time operates away from home or at district offices. He, therefore, has a much smaller amount of contact with other parts of the sales organization than employees with corresponding responsibilities in the factory have with production officials. Consequently, to get the salesman to work most effectively it is necessary to provide a compensation plan that is based on results. As sales territories vary greatly in sales possibilities the basis of any equitable compensation rests on a carefully compiled sales quota. Selling $20,000 of goods in one territory, for example, may be more difficult than $30,000 in another territory. Regardless of the method of payment, whether it be a commission, salary, or salary and commission or any other combination, the basis is the predetermined sales quota. That is to say, the amount of sales

expressed in units or products or dollars to be sold in each territory during a given period must first be predetermined. This predetermined quota will also serve as a standard of measuring performances.

SALES QUOTA A STANDARD OF PERFORMANCE FOR SALESMEN.— As a means of stimulating salesmen and appraising their performance the sales quota is especially valuable when it is based on fact rather than on opinion; when the salesman knows that it takes into account the conditions peculiar to his particular territory; when he knows that attainment of the goal set in his individual case is of the same difficulty as the attainment of every other salesman in his sales district. A quota which satisfies these requirements not only gives the salesman a definite mark to shoot at, but it also serves as a measure of sales performance against which no excuse can be raised.

To show how the quota may be used as a measuring stick for comparing sales performances, take two salesmen, Smith and Doe, who have definitely bounded territories and whose sales possibilities have been scientifically analyzed. To make the illustration complete, take a company selling three different lines of goods, and assume that the relative possibilities for each of the three lines have been determined; that each salesman's territory has been properly charged with his share for these lines and that the quota of each is a definite amount of business to be secured during the year, apportioned by months.

The quota of each salesman is expressed in "points" of $25 each. A sale of $100, therefore, represents four points. Suppose the following is their record for January:

Smith	220 points
Doe	220 "

Sales territories cannot be alike as to productiveness. Only by strange coincidence would two territories have exactly the same valuation. From the standpoint of measuring sales performance, one of the major purposes in predetermining the sales valuation and setting sales quotas is to ascertain how much business ought to be forthcoming from each territory rather than what each salesman ought to sell based on his past experience. Every territory represents a certain amount of sales opportunity for a concern, and if the salesman does not attain his quota (assuming that he can with proper effort make his quota), he is losing money for his company and should be superseded by some one who can secure the proper territory quota.

Assume that the quota for January was as follows:

January quota for Smith	190 points
January quota for Doe	240 "

The records of the above two salesmen should be placed together on a quantitative basis and their performances compared on a percentage basis:

	Quota	Sales	Per Cent of Sales
Smith	190	220	115
Doe	240	220	92

The real significance of this record is that it shows clearly the true performance of both men. Without quotas their results are on a par; but by means of a quota system, it is clearly demonstrated that Doe's record is better by 23% than that of Smith.

The quota device, as illustrated above, is very important not only as a guide

to the salesman but to the branch or district manager as well. Sales results can be fairly appraised because each salesman's territory has its own measuring stick, so to speak, based on the same known factors. The results of each salesman are indicated on his own scale of possibilities and not on a general average. Without proper standards of predetermined territory-valuation each salesman would be judged by the money value of his sales. The one who sold the largest volume would be considered the most valuable even though he has not done half as well as another man selling in a territory less fertile.

ANALYSIS OF SALESMAN'S RECORD BY LINES OF PRODUCTS.—Under the quota system a salesman's record can be analyzed from another aspect. Since each line has a separate quota, it is possible to analyze Smith's record to see if he has sold a balanced line.

Suppose the following is Smith's January record:

A Line.....	100 points	$2,500
B Line.....	80 "	2,000
C Line.....	40 "	1,000
Total.....	220 "	$5,500

It is not known how well or how poorly Smith did in connection with the individual lines until we compare his January assignments by lines with his sales.

Suppose the January quota points were distributed as follows:

A, 80 points; B, 80 points; C, 30 points; total, 190 points.

By application of his quota his record reads as follows:

	Quota	Sales	Per Cent of Sales Quota
A Line.....	80	100	125
B Line.....	80	80	100
C Line.....	30	40	133
Total.....	190	220	115

It must not be understood, however, from the foregoing illustration that salesmen cannot be judged by one month's sales performance. A salesman must have time to **adjust himself to his territory,** so that he can line up his prospective buyers. This takes time and for this reason **sales records** should by all means be **cumulative,** indicating clearly the performance of several months rather than of a single month, which may be exceptional. A sales executive is interested in knowing the progress of his men from time to time, and for that reason tendency charts should be maintained covering yearly periods. These charts will show plainly the productiveness of salesmen, and they can be so constructed as to indicate the volume as well as the percentages of the quota.

POINT-CONTESTS VS. THE SCIENTIFIC SALES QUOTA.—The foregoing illustrations emphasize clearly the superiority of the scientific quota based on territorial factors over the simple point contests or "games" among sales forces. In point-contests each salesman competes only to prove himself better than his fellows. His superiority is recognized even though he may not exert his own best sales efforts. Quite the contrary is true of the quota plan as pointed out, for each contestant strives toward a standard of possible attainment set on the territory for which he is responsible. His degree of success can be measured by comparing the percentage of the quota that he has attained with the corresponding percentages of his fellow salesmen. In every form of point-contest there should be equal opportunity for all contestants. With this as a

basis the comparison of units may be in any form such as volume in dollars, number of new accounts, or any other unit for evaluating attainments. The predetermined quota for each territory is the starting point.

DISTRIBUTION OF SELLING OVERHEAD ON THE BASIS OF SALES QUOTAS.—As has already been pointed out, sales quotas based on territorial valuation furnish a practical and equitable basis for distributing selling overhead. For the purpose of showing the profitableness of various assignments, it is very important that an equitable apportionment of all the overhead expense be made. By distributing this type of expense on the basis of sales made during the current period rather than on the basis of sales opportunity or sales quota, incorrect conclusions are formed relative to the profitableness of salesmen and territories. While it might be argued that a lean territory should be favored on account of the greater amount of developmental work to be done, the long stretches between customers and other considerations, it is easy to make a mistake in the other direction and charge a profitable territory, branch, or agency with more than its share, thereby making an incorrect showing with respect to the real profit of the organization.

Methods of Determining Sales Quotas

APPROACH TO PROBLEM.—There are **two general methods** for estimating or determining the sales estimate or company quota for the ensuing budget period. These are:

1. Figuring (from the top down) the amount of sales that it is desired to make during the period and distributing or apportioning them to the various selling units, meaning branches, agencies, and salesmen's territories.
2. Figuring (from the bottom up) as to the possible quota of each selling unit and then totalling this up as the figure for the company quota.

In either case the sales estimate must be considered in relation to the productive facilities. Manufacturing capacity must be adequate to turn out the proper amount of goods throughout the year to meet the seasonal demand. However, when a concern can sell more than it can economically manufacture, the problem of determining the quotas of the various selling units is comparatively easy. That is, however, not the case with most industrial enterprises today. There are few companies today which do not have surplus capacity; that is, they can produce much more than they can sell to advantage. The problem of marketing is not what it used to be. Enlarged productive capacity, increased competition, the switch to a buyers' market, and the pronounced tendency to shift the inventory load to the producer's shoulders, make it imperative for manufacturers to give increasingly more attention to selling activities. The problem of preparing a reliable sales estimate based on the relative sales opportunity in each territory or selling unit is complex. To prepare a reliable sales quota based on the relative sales opportunity in each selling unit contemplates a careful study of the concern's sales records and special sales factors as well as general economic conditions. Such a procedure is, however, essential, as the manufacturer must study his market to ascertain not only how much he can sell but where he can market most economically.

There are **two distinct aspects** in connection with the problem of determining sales quotas. The one is concerned with the establishment of the objective, i.e., **the company quota;** the other pertains to the equitable distribution or

apportioning of the total quota to the selling units. Both aspects of the problem contemplate a careful study of the company's sales records by products or classes of goods, by territories, by customers, etc. However, the former aspect of the problem requires in addition to these due consideration to the company's resources and policies, as well as general business conditions as indicated by the forecasting services.

GENERAL SALES FACTORS.—Various methods may be pursued in making up the sales quota. One way is to combine the estimates submitted by the salesmen or the branch managers in case branches are operated. Such a sales estimate is, however, incomplete as it does not take cognizance of such factors as changes in the price level, the business cycle, general industrial conditions, the growth of the company, additional appropriations of funds for sales efforts, etc., since these vitally affect the volume of sales. To make the proper adjustment for each district or salesman's territory, and to give proper consideration to each of the above factors would make the determination of the sales budget extremely complicated. The **better procedure** is to determine, first, the total quota on the basis of past sales and the factors mentioned above, and then apportion the total sales estimate to the various selling units, i.e., to the branches, agencies, and salesmen's territories on the basis of sales opportunity in each.

For example, let the total sales of the preceding year as shown by the sales record be represented by 100%; estimate the per cent of change as produced by the various sales conditions; then add or subtract the per cent of change according to whether it is positive or negative, and a total expressed in per cent for the next year will be obtained. This total multiplied by the volume of the past year's sales gives the total estimate for the following year. The procedure involved will be explained later. The purpose here is to explain general factors underlying the determination of the company quota, while subsequently methods of apportioning the quota to various selling units of a concern will be explained.

THE COMPANY QUOTA.—As an illustration of how the objective of a company is actually formulated by several well known concerns which have planned their sales program very carefully for some time the following quotations are given:

"Our first step toward the establishment of a sales budget for a year is to determine the objective. What is to be the percentage of increase in our sales; what is to be the mark we are to set? General business conditions, past, present and anticipated; our last year's volume and the ease or difficulty with which we attained it; the attitude of the buying public—these are some of the factors we must accommodate when we draw up the equation of the future business. Weighing, analyzing, adding, subtracting, we arrive at a certain net conclusion —the desired percentage of increase. Let us assume that to subdivide and apportion it." ("How Palmolive Budgets Sales," by A. J. Lutterbach, Comptroller of Palmolive Co., *Sales Management*, July 1922.)

Another concern which has given careful consideration to the problem of setting sales quotas scientifically for several decades uses in the main the same procedure as indicated in the following quotation from a letter of one of the executives of the sales department:

"Our method very briefly is to first establish a figure for the year representing the total amount of business in dollars that we can reasonably expect to secure in that year, taking into consideration the sales volume secured in previous years, business conditions and other factors, among which is included the

capacity for machine production in various branches of our factory. After setting this figure representing the gross volume of business to be secured we distribute it among our agencies on the basis of two factors, the first being the number of business enterprises in the territory; second, the number of machines already in use."

AMOUNT OF THE SALES QUOTA.—On account of changes in market conditions, seasonal fluctuations, policies of the company as well as inadequate statistics relative to past sales of the industry, it is not possible to make a sales quota mathematically accurate. In other words, it is hard to determine in advance what percentage of the past sales volume the quota for the ensuing period should be. Should it be an increase or decrease over the previous year, and how much? There seems to be a difference of opinion as to whether or not the sales quota should be above or below an attainable goal. It may be an amount of business that the company confidently expects or hopes to sell, or it may be arbitrarily placed above or below that figure. If placed above, it is on the theory that the higher the aim, the greater the results are likely to be. At the same time the company should not handicap itself by setting a mark which only a part of the sales force can reach. If it is placed below, it is because the quota is regarded as a minimum to be exceeded so far as possible. On this point C. P. Staubach, a leading advocate of the sales quota idea, and formerly General Sales Manager of Burroughs Adding Machine Co., says:

"Perhaps the best basis is a quota beyond the previous year's results but below the current year's expectancy. When men know that this is the basis, they realize that the company quota is a minimum; that it is not unreasonably above the previous year's actual results, and that they have every chance to make better than quota. Every man likes to reach and then exceed a 100% estimate of his powers and possibilities. No one wants to feel that quota can be reached only by terrific effort or unusually favorable conditions. A fair distribution is of utmost importance."

Even though no definite formula by means of which the total amount of business a company can do can be definitely determined, the sales estimate should not be guessed at. The general considerations which should form the basis for the preparation of this estimate may be put under the following general headings:

1. Past performance
2. Probable business conditions
3. Secular growth of sales
4. General plans and policies of the concern

PAST PERFORMANCE.—The starting point in making a sales estimate in any concern is past performance. By this is meant the volume of business it did in the past, particularly in the year just closed. This is the point of departure for estimating future sales. Complete sales records are indispensable as a basis for making forecasts for the next year. Every company normally increases its sales from one year to another. However, the amount of business to be budgeted in any particular year must be determined with great care in the light of conditions prevailing at the time.

PROBABLE BUSINESS CONDITIONS.—In the process of setting up a quota for the business as a whole the first general problem is to determine the **probable course of the business cycle** for the next year. A study of the concern's past sales records over a period of years will indicate the secular trend or normal growth of the concern. By normal growth is meant the increase of each year over the previous year. But unfortunately, external conditions are rarely

normal. One of the fundamental characteristics of present-day industrial organization is the cyclical movement of business activities, the alternative periods of depression and prosperity. Not only is there a general business cycle but **each industry has its own cycles.** Every business should, therefore, study carefully its past sales extending over a period of years to determine its cycles and see if they correspond in point of time with the cycles of general business. Such a study would no doubt prove fruitful, as not a few concerns in the last few years have suffered great losses through failure to anticipate a declining market. For example, if production is increased in anticipation of an increase in sales volume and a depression suddenly sets in, inventories accumulate beyond current needs. The excessive stocks must then be sold at a reduced price and a consequent loss to the business. In case the management fails to sense a rising market, the result is just the opposite. Under such conditions sales are underestimated, production is curtailed and as a result, profits are not realized.

CHANGE IN PRICE LEVEL.—In establishing a sales quota due consideration should be given to the probable course of prices. This is particularly important in times of violent changes in the price level, when prices are either rapidly moving upward, as in times of great industrial activity or declining when a depression sets in. In a time of rising prices due allowance should be made in setting up the sales quota, for the same number of units as sold in the preceding year will bring a greater amount of money. In the case of products for which the demand is relatively constant and inelastic, a considerable portion of the total sales constitute a change in the price level.

Index numbers reported by such agencies as Dun's, Bradstreet's, and the Bureau of Labor Statistics will show the change in prices from time to time. A change in price level is also revealed by bank clearings outside of New York City. By comparing the average clearings of the year just closed with the preceding year, the per cent of increase or decrease in price level can be ascertained. If, for instance, the bank clearings outside of New York City for the year just closed have increased 10% over the year previous, it is evident that a change in price level has taken place because bank clearings increase when prices rise.

SECULAR GROWTH OF SALES.—In addition to the price influence it is desirable to consider the secular trend or growth which the business normally experiences. Many established businesses, taken over a period of years, have a fairly constant rate of increase in sales from one year to another. In other words, in most companies there is a certain percentage of increase in sales volume which comes as a result of increase in population and general industrial development, and of general good-will established. This **normal rate of growth** can be computed by a statistical process in terms of dollars which in turn can be reduced to a definite per cent.

CHANGES IN GENERAL PLANS AND POLICIES.—Another important consideration in establishing a sales quota is concerned with the general plans and policies of a concern. In many businesses there is a special department called by various names, such as sales engineering, sales promotion, sales development, or sales research department, whose function it is to study sales possibilities and to recommend changes in sales policies and methods. As a result of such recommendations new lines may be added; old lines may be dropped; new territories may be entered; new agencies or branches established; new methods of distribution put into effect; changes in prices or terms of sales made; additional advertising carried on; more salesmen added; and numerous

changes made. If additional advertising is provided for, the total volume of business will be increased. The effect in terms of sales should be carefully considered.

SUMMARY.—When all the percentage changes of the factors discussed above have been determined in relation to the volume of the past year which is taken as the basis, the quota for the following year can be computed. An illustration of the procedure would be as follows:

Suppose that the last year's volume of a concern was $10,000,000 and the estimated percentage of increase as represented by the factors as explained above is as follows:

1. Probable changes in business conditions and price level	5%
2. Secular growth of sales	2%
3. General plans and policies	3%
Total increase	10%

The quota for the next year would be 110% of past sales, $10,000,000, or $11,000,000.

It is not intended that the foregoing factors for estimating the total volume of business be regarded in any way as final. They are only the general factors as affecting every business. In addition to these, every individual enterprise has other specific considerations pertaining to the channels of consumption of its particular product which need to be recognized. For example, a manufacturer of products consumed in new buildings, by railroads, and in the oil industry, would need to consider the state of business activity in each of these industries and to determine the percentage of increase or decrease to be expected from each during the next year.

FORM OF SALES QUOTA.—The terms in which the sales quota is to be expressed depend upon the type of business and the purpose for which the quota is to be used. In the past, when sales production and expenses were budgeted in a more or less informal way primarily for the purpose of financial control, the expression of the anticipated sales in terms of value was adequate. For the purpose of financial control all estimates must be translated into dollars and cents; but for the purpose of sales administration and effective co-ordination of sales, production, and purchases, estimates must be expressed in the form of physical quantities and not in terms of value only. There are possibly a few concerns which can effect sales and purchase control in terms of value, but these cases are rare.

More adequate control can be secured when sales are expressed in physical units, such as pieces, pounds, yards, etc., indicating geographical distribution, because the activities of the production department are in terms of items and not in terms of dollars and cents. The production department cannot make up its departmental budget if the total sales quota is, for instance, expressed in one grand total of dollars for the budget period. The production manager should know the number of the various types of products and items that are to be produced.

IMPORTANCE OF SALES PLANNING IN TERMS OF ITEMS.—There are several reasons for setting up sales quotas in terms of items or classes of products. In the first place, orders for goods are in terms of individual units of products. It is possible to have a large inventory and yet not to be able to fill certain orders if the particular classes of items called for are not available. In the case of goods which are subject to style changes it is of course impossible to determine very accurately the quantity of all the items needed. Nevertheless, past sales records will indicate fairly well what the demand has been by various

customers for different items. In some organizations the preparation of sales quotas by items is very complex. The number of items handled may run into thousands. Under such conditions it is a difficult problem to estimate sales and plan production in terms of individual items. There is no doubt that in some instances the number of items is so large that this procedure would be impracticable. A careful study of the sales records by items will usually show that the bulk of sales are made from a comparatively few items. Where this is the case, a list of the rapid-moving items will probably constitute the greater part of the sales.

In the second place, as has already been pointed out, sales quotas should be studied in relation to items or classes of products so as to produce the **best aggregate result in terms of net profit.** If the margin of profit by items of merchandise or groups is indicated, the setting up of quotas in terms of items for salesmen will be expedited. This will not only help to construct a budget which will yield the greatest aggregate return, but it will also serve as a guide in sales administration. When the sales manager knows the margin of profit of the various products, he is in a better position to formulate policies with regard to discounts, and size of orders. This is especially true in connection with contract sales. Sales compensation plans can be devised so as to reward salesmen in accordance with the amount of profit they produce rather than with the volume of sales they make.

MONTHLY SALES QUOTAS.—The company quota will be more effective when broken down into monthly or quarterly amounts. This makes for **closer co-ordination between sales and production** and thus reduces the inventory to be carried. Monthly sales quotas serve also as a means of controlling selling units. If definite amounts are to be sold each month, there is a tendency on the part of salesmen to apply themselves more uniformly throughout the season or year than if their work is checked up every six months or at the end of the year.

Monthly sales quotas can be set up by determining the percentage contribution of each month to the total sales. This percentage figure, for example, for the month of January can be derived by adding all January sales, and by them obtaining an average figure (four years) by dividing by four. If the amount thus obtained is divided by the average sales for the four years, the normal percentage weight of January sales can be determined. In a similar way the amounts for the other months of the year can be ascertained. Then, by applying the percentages thus obtained to the estimated quota for the ensuing year the per cent of the total sales for each month of the year can be established.

QUARTERLY QUOTAS.—Instead of setting quotas for a year, concerns sometimes put them on a quarterly basis. In the first place, when the attainment of the quota is a year away, the incentive during the first part of the year would seem to be less than during the latter part when the branch offices or salesmen are approaching the goals set for them. If quotas are set for only three months in advance, the incentive which the quota furnishes is distributed throughout the year. In the second place, it is highly important that **quotas conform to prevailing business conditions** throughout the entire country. In entering a general wave of prosperity the quota should be higher than when entering a wave of depression. The accuracy with which business conditions may be predicted will depend upon the length of the period covered. Forecasts can be made with much more certainty for a period of three months than for a year. In setting quotas for a quarter only, it is necessary that careful consideration be given to the **regular seasonal fluctuation in the different branch**

offices throughout the country. These will vary in different sections. In order to get an accurate measure of the seasonal differences a study should be made of the volume of business of each period over a number of years. This can be done by following the procedure described above for establishing monthly sales quotas.

PROCEDURE OF APPORTIONING THE QUOTA TO THE SALES UNITS.—With the company quota set, the problem becomes one of distribution. In other words, the next thing to be determined is the share of the whole quota each part of the company, agencies, branches, and salesmen is to carry. This should be done primarily on the basis of **territory valuation** as will be explained in subsequent pages. In order to facilitate the comparison of sales figures it may be desirable to establish what is known as a **"sales point."** As the products in most concerns are varied, consisting of various items grouped by classes, the administration of the sales quota is very much facilitated by expressing sales in points. To illustrate, the National Cash Register Company, one of the first companies which successfully used the quota device in its sales organization, originally estimated the number of registers to be sold in its various territories on the basis of one register to each 400 population. As its registers were improved, different types of machines, varying in prices to suit the convenience of different businesses, were built. Consequently the number of registers sold was abandoned as an objective and a **point system** in which a point represented $25 of sales was adopted.

Other progressive companies operating on a quota system are also using some form of point system. The value of a sales point is not an arbitrary figure. The amount of sales expressed by a point should vary to suit the conditions of the individual business. It will depend somewhat on the type of goods sold. When the average size of the order is around $10, it is practical to have a point that will constitute sales of that amount. The amount to be sold by each branch should then be stated both in dollars and points as given in the table below.

Sales Units	Sales in Dollars	Sales in Points
Boston Branch.....	4,059,862	405,486
New York Branch.....	5,786,500	578,650
Philadelphia Branch.....	2,132,580	213,258
.....	.....	.....
.....	.....	.....
.....	.....	.....
Sales Quota for 19—.....	.....	.....

POINT SYSTEM FOR EACH GROUP OR CLASSES OF PRODUCTS.—When a number of items are carried, the amount to be sold of each should be expressed in points. The advantage of "point" quotas can be demonstrated by the use of the following hypothetical table, indicating record of sales performance of a selling unit.

Sales by Groups of Products

Group	Quota Points	Sales	Per Cent of Sales Quota
A	80	100	125
B	80	80	100
C	30	40	133

When sales quotas and actual performances are expressed in this form, the work of salesmen, agencies and branches with reference to sales can be readily appraised. According to the sales points it would seem that group "C" was neglected, but when compared with the quota, it will be seen that its sales represent the highest per cent of the assigned quota. By assigning larger quotas in those groups which the concern wishes to push, the salesman will be impressed by the need for additional sales effort.

The salesmen, however, should not be expected to put forth additional sales effort unless the management provides them with the **necessary** incentives. In order to elicit a higher degree of selling effort, some sort of **bonus or commission plan for paying salesmen** for sales in excess of quota should be adopted. The attainment of the assigned sales quota will constitute 100% efficiency.

MONTHLY QUOTAS FOR BRANCH SALES MANAGER.—Monthly quotas should also be set up for each branch in the manner indicated above, and the sales performance may be recorded as shown in the following table.

Month	Quota Points	Points Sold	%	Previous Year
January				
February				
March				
April				

In the first column is entered the estimated quota in sales points for each month, as previously determined. The second column shows the actual sales results achieved, entered monthly after the figures for the month are compiled. This is the "proof of the pudding," as it indicates whether the quota was properly estimated in relation to the possibilities for the given period. The third column, showing the per cent attained in the month compared with the estimate, is very significant, since the percentages of achievement are much more graphic than are totals in dollars, cents, or units.

Apportioning Company Quota

THE PROBLEM OF QUOTA SETTING.—In the preceding pages, only the more general factors which pertain to every business have been explained. In every industry there are certain other special factors that should be considered in connection with the company quota. Regardless of whether the company quota is established by figuring "from the top down" as outlined, or from the "bottom up," the **problem of apportioning the estimate to the salesmen** according to sales opportunity arises. The volume of business a concern desires to do changes from year to year, and normally there should be a certain amount of increase in physical units even if the price level rises. The **general practice of most concerns** is to set their sales estimate for the coming year a little above that of the preceding year. Such a policy leads to sharp competition among companies and especially among those in the same industry.

Assuming that the increase in sales, whatever the amount may be, has been settled by the management, the next problem the sales division has to solve is to determine what proportion of the increase each branch, agency (if agencies are operated), or salesman's territory should bear. To make the apportionment in an equitable way contemplates territory valuation. To do

this properly it is necessary to ascertain the comparative sales opportunity of the various sales territories.

PROBLEM OF TERRITORY VALUATION.—The factors affecting the sales of different products are many. No general formula for measuring the sales possibilities can be devised which is applicable to all businesses. A procedure which is practicable in one organization, may be applied in another concern which sells different commodities. Every business, to some extent, is different from any other business. Notwithstanding this, as one writer says: "While it is true that quota plans are not of the ready-to-wear variety, and that seldom, indeed, can you find a plan used by one concern that will lend itself to your needs, still the fundamentals of quota-fixing are much the same." In other words, there are certain **fundamental principles of procedure** of territory valuation and sales quota fixing which are applicable to all businesses.

PRINCIPAL FACTORS IN SETTING SALES QUOTAS.—As a basis for setting quotas, various factors are used by different organizations in various industries. The **most common single factors** used are the following:

1. Past performance, shipments of previous year plus a certain per cent of increase.
2. Population.
3. Per capita statistics.
4. What salesmen think they can produce.

There is a tendency, however, on the part of the more progressive concerns to use several factors as a basis for setting sales quotas.

PAST PERFORMANCE.—The **traditional method** of computing sales quotas as followed probably by a vast majority of concerns is based almost entirely on past sales. Not infrequently, the sales estimate is a purely arbitrary figure representing the opinion of some home office official as to what the volume of sales should be made in the various territories. The **usual procedure** is to increase the company quota for the following year by a certain arbitrary per cent over the previous year's sales and then apportion the total quota to the selling units on the basis of their past sales.

Suppose a concern did $10,000,000 worth of business in 1924, and it sells its products through its four wholesale branches, whose sales are as follows:

Branch A	$ 1,500,000
Branch B	2,000,000
Branch C	3,000,000
Branch D	3,500,000
Total	$10,000,000

If for the year 1925 the company plans for a 5% increase or $500,000 more business than in 1924 the total quota will be $10,500,000, and on the basis of past sales will be apportioned to the branches as follows:

Branch A	15% × $10,500,000	$ 1,575,000
Branch B	20% × $10,500,000	2,100,000
Branch C	30% × $10,500,000	3,150,000
Branch D	35% × $10,500,000	3,675,000
	100%	$10,500,000

Within each branch the increase is similarly apportioned over the salesmen's territories.

Obviously, sales quotas distributed in this manner will not stimulate much enthusiasm in the branch manager, as he will not be inclined to take the sales estimates made in this way very seriously. Should his performance fall far

from the mark, either below or in excess, he will simply regard it as a bad "guess" on the part of the home office official. If some of the other branch managers in the organization far excel him in quota attainment, he will regard the difference as due to the standard set in each case rather than to difference in managerial efficiency. The **maximum value of a quota** can be attained only when the branch manager knows that it is based on the fundamental economic conditions of his territory and that attainment of the goal set in his individual case is of the same difficulty as that for every other branch manager in the organization. When a quota is established on a scientific basis and satisfies these requirements, it can be used as a standard for measuring managerial success.

LIMITATION OF PAST PERFORMANCE AS A BASIS FOR SALES QUOTAS.—Notwithstanding, past sales is a very important factor in estimating the amount of business for the following period, and should be given careful consideration. In fact, it is the starting point for sales budgeting. Proper records will show what the sales have been in each territory by products, customers, etc., and will also indicate the amount sold by weeks and months throughout the season and year. However, the exclusive use of the past sales factor as a basis for determining sales quotas is unscientific and usually inaccurate. In the first place, it does not take into account trade conditions, changes in price level, as previously explained. For instance, if the price level is, say, 5% higher at the time the sales quota is determined than it was during the previous year, and if the rise promises to continue throughout the following year, the sales volume expressed in dollars will be at least 5% more without increasing the physical volume. Expressed concretely, if a concern's sales have been, say, $20,000,000, it will have to do at least $21,000,000 of business to equal the previous year's record in terms of physical units. Conversely, in case prices are on a decline more units will have to be marketed in order to equal the previous year's amount of sales expressed in dollars. Both from the viewpoint of sales administration, particularly in reference to paying salesmen, and in the co-ordination of sales with production the change in price level, if it affects the prices of the company in question, is a very important factor. The production and sales managers usually have different viewpoints regarding the quota. The former is inclined to figure in physical units, while the latter estimates sales in dollars and cents.

Secondly, such a method does not take cognizance of changes in market policies on the part of the business, and such changes are effected from time to time in most companies. For example, advertising activities may be increased, the territories may be cut down, and more salesmen employed, and consequently the sales will be increased.

In the third place, the use of the past sales factor exclusively as a basis for apportioning sales quotas presupposes model salesmen and that the products have been evenly distributed throughout each sales district in accordance with sales opportunities. In other words, this procedure does not take cognizance of the fact that some sections are closer to the saturation point than others, and therefore, cannot absorb the increase as readily as other territories less developed. The distribution of the sales increase each year on the basis of past performance does not take this factor into account. By apportioning the increase of the anticipated sales budget according to past performance there is a tendency to reward salesmen who have previously loafed on the job and who have not worked their territory as much as they might have done. Their quota will as a result be much lower than it should be. Then, if salesmen are awarded a bonus in addition to their salary, as is commonly done, according to the per cent of the quota they attain, much dissatisfaction results.

SALES RESEARCH IN RELATION TO PAST SALES FACTOR.—The importance of the past sales factor as an index of possibilities or relative sales opportunities in the several sales districts and territories will depend upon the length of the time a concern has been in business and the amount of sales research it carried on for the purpose of developing its market. A concern which has been in operation for two or three years cannot place nearly as much reliance on past performance as a company that has been distributing products for several decades. Especially is the past sales factor a good index of sales opportunity for **an older concern** which has supplemented its past performances with careful sales research. In other words, enterprises which have made a study of factors which affect the sales for their product and have apportioned their company sales quota to each district and territory accordingly will have stimulated sales development in all territories.

An illustration of this type is the National Cash Register Company, which has been operating on the sales quota system for over 30 years and has developed its territories so well that today it can place a great deal of emphasis on the average business secured from the past five years in any of its territories. Through intensive analysis of the factors this concern has developed its sales districts to such an extent that it knows approximately what each should produce. Thus, each year its "past performance" factor becomes stronger as a measure for predicting sales.

POPULATION.—A common type of basis for sales quotas is population. This sales factor, however, has serious limitations in indicating sales opportunity. When used by itself, population is very **inadequate as a basis for estimating or apportioning the company quota,** because only very few concerns, if any, produce commodities for which equal per capita sales may be expected in all sections of the market, provided the market is more than local in scope. To illustrate, a high-grade residential suburb of 15,000 population is far better market for davenports retailing at $350 than a mill town with ten times that number of persons. Conversely, the mill town will unquestionably prove a far better market for chewing tobacco per capita than the exclusive residential suburb of 15,000. In each sales district of every concern there are various classes of consumers having widely different tastes and desires and the relative proportion of these consumers to total population varies in different sections of the country.

Again, the inadequacy of population statistics as a basis for setting sales quotas is to be seen in the **different activities of cities** of the same population. Some cities are distinctly jobbing centers. By virtue of their geographical location and commercial development they are distributing points rather than retail outlets. More wholesale distributors are found per thousand population in some cities than in others. Accordingly, the sales of branded merchandise in such jobbing centers should be decidedly greater than in other cities which lie in the non-jobbing zones, where jobbing is more of a name for local distribution from jobbers to retailers, rather than distribution over several hundreds of miles of territory.

WHAT SALESMEN THINK THEY CAN PRODUCE.—Some concerns set up quotas on the basis of what their salesmen think they can sell. This method would seem to be impractical for an aggressive enterprise. In the first place, a salesman who is engaged only in selling is not in as good a position to get the perspective of the sales opportunities as the sales manager who has at his command the salesman's reports and estimates based on other factors. Then, too, salesmen who travel territories for several years usually get fixed ideas

concerning the volume of business that it is possible to obtain in the territory. Not infrequently salesmen develop their territories by making the retailers their own customers rather than customers of their concern. They call on "pet" accounts, i.e., dealers whom they can sell with least possible effort, and neglect many other prospective customers who might be sold with the making of an additional effort.

WEALTH STATISTICS.—Too much attention may also be attached to wealth statistics in undertaking an analysis of the sales possibilities of an article sold over a wide area, and for which a market index can be determined only with difficulty. As a rule, wealth statistics **taken alone** are **not reliable** in determining potential distribution possibilities. In the first place, it is practically impossible to get reliable wealth statistics, and secondly even though such figures were available, they would give but a slight clue as to the probable demand for any particular commodity. Published wealth statistics are commonly reduced to a per capita basis, but a **per capita wealth figure is of little value** for estimating potential sales for it does not indicate the distribution of wealth. For the sale of most manufactured products it makes a great deal of difference whether the wealth in a community is fairly evenly distributed or highly concentrated in the hands of a few people. For example, 90% of the income in certain sections may be received by less than 20% of the population. For certain very high-priced commodities such a distribution of wealth may be an index of great sales opportunity; for most articles of consumption a more even distribution of capital would be far more desirable from the viewpoint of making sales.

CONCLUSION ON PAST PERFORMANCE, POPULATION, WEALTH STATISTICS.—It must not be understood from the foregoing discussion that population and wealth statistics or income are not important factors in determining market possibilities. They are **significant sales factors when properly used along with other factors.** The purpose of discussing them here is to call attention to the limitation of these factors and to point out the danger of placing too much weight on any one of them. In order to sell most economically a concern should know, first of all, the per cent of its total distribution possibilities that each of its sales territories represents. It is not likely, as stated before, that the actual sales as shown by the sales records of a firm are in exact ratio to the possibilities in every section. Some territories will show greater opportunities for sales development than others. It is, therefore, important that every effort be made to ascertain the relative sales opportunities of each sales district included in the selling area.

COMPOSITE FACTORS.—The **more scientific plan** of apportioning sales quotas to selling units contemplates the consideration of several factors in conjunction with past performances. The nature of these factors will depend upon the type of product sold, whether, for instance, it is a commodity that is used by every person, such as shoes, groceries, etc., or one that has a specialized use, such as automobile tires, steam shovels, soda fountains, etc. Every concern will have to determine what the particular sales factors of its product are.

In setting sales quotas for the sales force of any company, the first step is to determine who its **customer units** are, and where they live; in other words, who are its potential consumers as well as its actual purchasers. This is a relatively easy problem in connection with some products and a very complex one in others. The manufacturer of office appliances will find his potential purchasers limited to business enterprises, schools and colleges, etc. The number and the

location of the potential purchasers of this type of goods is relatively small and can easily be secured for each state and county. The same applies to producers of equipment and material which is sold to manufacturers. The soda fountain manufacturer will find his potential buyers among business enterprises. Other illustrations could be given to show that some products have a limited and well defined market. On the other hand, in the case of certain food products, which are more or less consumed by every person, the entire population of a community must be considered. For many other types of products the number of people between certain ages are potential purchasers.

Again, in analyzing the market for some types of commodities conditions other than those of a strictly personal nature need to be considered. The selling of electrical appliances is a case in point. Sales opportunities for this type of goods will depend to a large extent upon the percentage of wired homes in various sections of the country. For example, a manufacturer of certain electric equipment, in analyzing his market, found in one city of 300,000 population about 25,000 families supplied with electric current. In that city there were virtually 25,000 possible buyers. However, in another city having about the same number of people only about 3,000 households were equipped with electricity. Consequently the market in the second city was very much smaller.

It should be obvious from the above discussion and the illustrations that while there are some commodities which are consumed by the general population, the market for many other products is more or less limited to a restricted class of consumers which have to be appealed to and solicited. The particular sales factors will, therefore, vary with different industries. When two or more factors are used, the final quota figure is secured by giving each factor a value in accordance with the accuracy with which the factor reflects sales possibilities. The value is applied to each result. The procedure involved in estimating sales quotas when several factors are used is well demonstrated by two well known concerns, the Burroughs Adding Machine Company and the Detroit Steel Products Company.

HOW BURROUGHS ADDING MACHINE COMPANY APPORTIONS SALES QUOTAS ON BASIS OF COMPOSITE FACTORS.—The Burroughs Adding Machine Company manufactures adding machines of various types which it sells direct to business enterprises through its salesmen. This concern apportions its total company sales quota among its agencies **on the basis of two factors:** (1) the **number of business enterprises** in the sales territory, (2) the **number of machines already in use.** The agency quota is distributed among its sales territories on the same basis. This concern has found from a study of its sales records in all parts of its sales districts that the number of their own machines in use in any community is a fair index of sales opportunity in that place. A locality which has 100 of their machines in use is a better market than another which has only half that number. The Burroughs Adding Machine Co. has a complete record of the sales made in each county in every state. This constitutes one of the basic sales factors used in estimating the sales opportunity in each county.

The other factor is the number of business enterprises. Included under this heading are businesses of all types—banks, public utilities and schools, colleges, etc. All these institutions are studied and classified in various ways. "A Business Enterprise Count," published by the R. L. Polk Co., is used as a basis for the classification. The R. L. Polk Co. has grouped all businesses under eight major classifications as follows:

Manufacturers	Banks
Wholesalers	Financial
Retailers	Public Service
General	Government

The major groups are subdivided into more detailed classifications, numbering over one hundred different lines of trade in all. For instance, manufacturers are divided into 27 divisions as to kinds of business as follows:

1. Agricultural Machinery and Implements
2. Automobiles: Auto Supplies and Accessories
3. Boots: Shoes and Leather Goods
4. Cigars and Tobacco
5. Clothing and Dry Goods

Etc.

Subdivisions are similarly made of the other major groups.

All concerns except banks are divided into four groups according to rating as given below:

1. Those rated at $35,000 and over.
2. Those rated from $5,000 to $35,000.
3. Those rated less than $5,000.
4. Those not rated.

The banks are divided into groups according to volume of deposits.

1. All banks having deposits of over $5,000,000.
2. All banks having deposits of over $1,000,000 to $5,000,000.
3. All banks having deposits of over $400,000 to $1,000,000.
4. All banks having deposits of less than $400,000.

For every county in the United States the Burroughs Adding Machine Co. has a valuation sheet in which the number of businesses are classified as follows: financial, government (United States, state, county, city, etc.), public service, manufacturers, wholesalers, department stores, general stores, garages, other retailers, general. A definite **sales value** has been worked out for each class of enterprise according to its rating. By placing a fixed valuation, for illustration, on a wholesaler rated above $25,000 as against a wholesaler rated below $10,000, or a department store rated between $10,000 and $25,000, and a manufacturer rated between $5,000 and $15,000, a good estimate can be made of the value of each potential market. A value is set on every business. Banks carry the highest valuation, while barber shops carry the lowest.

After a number of businesses in all the lines with their sales valuation is known, it is only a matter of multiplication and addition to compute the sales valuation of each. The territory valuation and quota computed on the basis of the number of enterprises is divided by two. The total quota based on the number of machines in use is also divided by two. Half of the total of the quota computed from each factor, viz., the business enterprise and the machines in use, is added and the sum of the two form the quota.

A concrete illustration of the way the "past" sales and the business enterprise factor may be applied is as follows:

Suppose that the machines in use in Delaware County represent 1,000 quota points and the machines in use for the entire country represent 100,000 quota points. This shows that Delaware County has in the past absorbed 1% of the company's output, i.e., 1% of the machines have been sold in Delaware County. The estimated production for the next year, is, say, 35,000 quota points. If Delaware County sells the same proportion of the total machines as it did in the

past, its quota should be 350 points, plus a certain number of points for increase in business. It is evident that based on figures of past performance there should be no reason why a salesman could not sell 350 points in Delaware County during the next year.

Suppose the business enterprise valuation as discussed above would give a quota of 380 points. If each factor, i.e., past sales or product in use, and business enterprises, is given equal weight, each would be discounted by 50% and the result would be as follows:

Past sales or product in use.....	50% of 350 points =	175 points
Business enterprises.....	50% of 380 points =	190 "
Delaware County quota.....		365 "

Each factor will serve as a check on the other. If one of the quotas is slightly out of line, it will be corrected by the other. If a certain county in the past, for instance, has not been producing as much business as it should, its quota based on past performance will be relatively low, but it will be brought up to a fair valuation by the quota arrived at from the count of business enterprises.

DETROIT STEEL COMPANY'S METHOD.—Another concern setting its quotas on the basis of territory possibilities instead of past performances is the Detroit Steel Products Co. As this company manufactures a building material product adapted for various types of industrial buildings, the sales factors are different from those of the adding machine manufacturer. As before stated, the sales factors to be used as a basis for territory valuation and sales quotas vary with the lines of business. While the business enterprise factor is important in determining sales possibilities for some lines of products, in other industries it may be entirely disregarded.

The Detroit Steel Products Co. used the following five factors in establishing a sales quota for each territory.

1. Population.....	20 points
2. Number of architects, engineers and contractors.....	25 "
3. Number of industries rated over $10,000.....	25 "
4. Average of three previous years estimates.....	20 "
5. Average of three previous years orders.....	10 "

An index of 100 points was used to cover all the factors. These points were divided among the factors in proportion to the importance the manufacturer felt that each played in determining the possibilities as indicated above.

The procedure as applied to a given territory is as follows: First, the population of the territory is divided by the total population of the United States and the resultant per cent is multiplied by the 20 index points. This gives the number of index points for population. Second, the number of architects and engineers and contractors in the territory is divided by the entire number in the United States, and this per cent is multiplied by 25. In the same manner, the procedure is carried out with all the other factors, and for all the territories. The points for the entire number of sales territories is added together to get the total index points for the country.

The company quota is set up as a certain goal which expresses the amount of business which the officials think they can attain during the ensuing budget period. This amount is represented by the total index points in the United States, as established by the procedure explained above. The share of the whole quota each part of the company, the territory, or agency is to carry, is established by computing the per cent of all the index points in the United States in

each territory or agency. This per cent is then multiplied by the total quota, which is expressed in dollars.

DETERMINATION OF POTENTIAL DISTRIBUTION DIFFICULT.—The purpose of the foregoing illustrations is to show how several sales factors may be used effectively for apportioning sales quotas to selling units. It will be noted that the products of these concerns have a somewhat specialized market, and the potential sales possibilities are probably easier to determine than other businesses which make goods for which there is a **general market.** In determining relative sales opportunity or distribution possibilities for this type of products a more complex problem is encountered. As an example, there are certain kinds of food products which everybody consumes more or less, such as Heinz's products, coffee, sugar, etc. Other examples are general household goods. How shall a manufacturer and distributor of this type of goods determine what portion of his sales quota should be sold in each section of his selling area? On account of the lack of proper sales statistics, the determination of the potential demand for many commodities, particularly those for which there is a general market, is very difficult.

While the census figures show the total production of the general types of commodities, they do not indicate where they are sold and consumed. A manufacturer, for instance, may find that in the past year the total production of the commodity of the industry of which his business is a part was $100,000,000, of which he produced $5,000,000 or 5%. But he cannot determine from the total figure where the commodity was marketed. Were it possible for a concern to obtain the annual total sales of the line it produces for each state, either in physical units or in money value, the problem of establishing scientific sales quotas would be very much lessened. Each concern could then estimate:

1. What per cent of the total production it produced.
2. What per cent of the total production was sold in each state.
3. What per cent of the total business it (the individual concern) did in each state and thus determine if it is receiving its proper share of the business done.

It is possible that sales information of this type will some time be made available through trade associations of the various industries. There is a strong tendency in that direction now. In the **life insurance business** it has been demonstrated how sales statistics along the line mentioned above may be made available. Within the last few years the large life insurance companies controlling somewhere around 80% of the business, have **pooled** from time to time the amount of insurance each company has written during the year and also the amount of insurance it has in force. Their problem of predicting the amount of insurance sales quotas each year for insurance companies is, therefore, very much simplified. The **automobile tire manufacturers** can approximately arrive at the total annual consumption of tires by securing the total registration of motor vehicles from each state. However, for most lines an "industry quota" is extremely difficult to determine, and consequently other methods of solving the problem of territory valuation have to be adopted.

SALES QUOTAS FOR PRODUCTS HAVING A GENERAL MARKET.—Generally speaking, a manufacturer who makes a product taken by the public and distributed nationally will find a number of factors throughout the country in the various communities which affect its demand. This is particularly true of **direct goods for personal consumption** rather than for the indirect goods of the more durable type. Take, for example, such elements as education, religion,

climate, superstition, as well as many others—all these more or less influence the sale of goods in one place or another. In determining the relative distribution possibilities of products which are common to the needs and desires of practically every one, it would be impractical to give attention to all those influences affecting the market as stated above. The two principal sales factors for this type of goods are purchasing units and income. A community with a reasonably dense population earning a fairly high income will be a good place to sell. While these two factors, viz., income and population, are fundamental they will not give an exact formula for predicting absolute results. So long as individuals are individuals, it will not be possible to derive a formula which can be applied universally even to a single line of merchandise.

A survey of the distribution of products would show wide variation as to the amounts consumed in different localities. Those products which are common to the needs and desires of practically everybody, such as coffee, sugar, salt, laundry soap, etc., already flow very evenly over the country. Population figures for this type of commodity should be a fair measure of the relative potential sales opportunities in each district. There are many other commodities which on account of being much desired by people generally would have a similar even flow in all sections of the country if the purchasing power of the people were evenly distributed.

It would, therefore, seem logical to assume that by properly weighting population and income, an index of the relative consuming power of communities could be obtained. In doing this, cognizance must, however, be taken of the fact as indicated above, that people and purchasing power are not evenly distributed. Some communities, though fairly densely populated, may on account of poor natural resources, lack of transportation, education, unfavorable climate, etc., have a low per capita income. Such localities may be average for the consumption of low-priced necessities, i.e., for commodities of general consumption, while for high-priced luxuries it may not rank very high.

WEIGHTING OF SALES FACTORS.—As has already been illustrated, when more than one factor is considered in determining the sales valuation of any particular territory, it is necessary to assign a definite weight to each factor. To illustrate, if population or customer units, past sales, and number of business enterprises are taken as factors for estimating the potential sales opportunity of a territory, the question of the **relative importance of each of these factors** arises. Should they be given equal weight, or should different values be assigned to each? The relative importance to be given to each is to a large extent a matter of judgment, since there is no method by which definite assignable values can be established. The fewer the factors to be considered, the less complex the problem of determining the relative weight of each will be.

In connection with the determination of territory valuation of those commodities for which there is a general market, i.e., those goods which are common to the needs or desires of virtually all human beings, a more complex problem arises. There are a few products in this category which already flow very evenly over the country. Illustrations are common articles of food such as salt, sugar, coffee, meats, etc. Many others could be mentioned which, though universally desired, are less widely consumed because of their relative costliness. In regard to marketing products included in the above class, there are a number of factors as previously stated, among which may be mentioned, education, transportation, and climate, all of which more or less influence the market for them. For practical purposes they may be regarded in the main as subsidiary. In the last analysis the basic factors are population and income.

WEIGHTING INCOME AND POPULATION.—The relative weight to be given to these two factors will depend upon the type of product with reference to the need it serves and its relative cost. For example, in the case of salt, a low-priced necessity which is used in every household, population preponderates. As we move away from this type of commodity, which is universally consumed, we find products which serve far more people less intensive wants and are less widely used because of their costliness. On the opposite end of the scale there is the high-priced automobile, a real luxury. Here income is the predominating factor. Hence as a **first step in weighting different factors** it is necessary to group commodities in some fashion according to their universality of consumption and selling price. In other words, establish a general classification of products ranging from those which are the least expensive and most generally used to those which are the most costly and which are bought and consumed by only a small percentage of the population. Such a classification can only be made arbitrarily, for there is no possible procedure for determining scientifically just how many divisions to make.

WEIGHTING OF INCOME AND POPULATION OR PURCHASING UNITS.—To illustrate this principle, assume that for practical purposes the various types of manufactured goods can be divided into nine different groups according to their universality of consumption. Merchandise in group one would include those commodities which are most widely used and which are generally considered as low-priced necessities, such as common table salt. Group two would embrace goods which are a little more expensive, and less widely used, and so on up to the ninth group in which would be found the highest-priced luxuries, such as high-priced automobiles, baby grand pianos, etc.

As a **first step,** before weighting these two factors for the purpose of determining the potential distribution possibilities of the products of any particular business, it is necessary to determine **what part of the population constitutes potential consumers.** As before stated the purchasing units will vary according to the commodity marketed. For some products the entire population may be weighted with the factor of income. In other instances consumption of the commodity may be limited to adults or women between certain ages, in which case only the percentage of the population constituting that number should be taken as purchasing units. Some personal consumption goods may be primarily bought by people engaged in certain occupations. In that case the number of people employed in those occupations constitute the purchasing units.

Having determined upon the purchasing units, the **next step** is to **weight against the income.** As, in group one, income is of less importance than purchasing, greater weight should be given to the latter factor. As we move away from group one towards group two the population further declines. Probably the proportion should be 9 to 1. In the final group the ratio of purchasing units and income may be reversed so as to stand 1 to 9. The weights to be given to each of the two factors, purchasing units and income, are only suggestive for the purpose of illustrating the principle of weighting. Each individual business has to determine the exact importance to be given to each factor. The theory underlying the principle is this: in the **low-priced commodities** population preponderates, while in the **more costly things** income is predominant, and for no type of goods can either factor be considered alone for estimating the potential sales opportunities.

Even in connection with the consumption of the cheapest articles consumed in the household a little more will be used per capita in the communities where

the income is greater because of the amount which might be wasted. Similarly, with regard to the high-priced commodities, population is a factor, for it is human nature to want to imitate, i.e., to desire to have the things which acquaintances or relatives possess. Some people will be found in every section of the country buying commodities whose cost is all out of proportion to their income, and there will be others who do not consume as much as they are potentially able to buy.

TYPE OF INCOME STATISTICS TO BE USED.—The results that can be obtained from the **population-income formula** will depend to a large extent upon the **reliability of the available income statistics.** Under the federal income tax law every person receiving a certain net or gross income is expected to make a tax return. If the returns were uniformly made by every individual receiving an income of $1,000 or more in each county of the several states, the **government returns** would be a fair index of the potential purchasing power in each sales district of an organization.

However, in a study of income by states made by the National Bureau of Economic Research, New York City, it was discovered that discrepancies existed in the number of personal returns made below $4,000. For some reason or another in some communities a greater percentage of tax returns are made in some states or parts of states than in others in which apparently the same economic resources prevail. In other words, people in certain states or parts of states seem to be more prompt and conscientious about making tax returns than in others. This applies to the lower income classes—those below $4,000. Above this amount the returns are probably uniformly made. A preliminary report, entitled "Statistics of Income," compiled by the Internal Revenue Department, gives a distribution of personal returns by income classes by counties for the calendar year of 1922 as follows: total number of returns; under $5,000; $5,000 to $10,000; $10,000 and over.

Obviously, the total number of tax returns, weighted with the population of each state and county, would not be entirely accurate for determining their relative distribution possibilities. However, while there is no constant ratio in each state between the number of returns ranging above $5,000 and those below, probably the results obtained by using only those returns of $5,000 and over would be sufficiently accurate for all practical purposes. When a more detailed classification of the income tax returns below $5,000 by counties is made available by the Internal Revenue Department so that all returns above, say, $4,000 are given, the income tax returns including all those of $4,000 and above, will probably be representative of each county, so as to make the income factor entirely dependable.

Reliable income statistics by states have been worked out by the National Bureau of Economic Research. This bureau contemplates carrying this work further and making a study of income by counties when sufficient funds become available to finance the project. When this is consummated, the problem of securing dependable income statistics both by counties and states will be solved.

PROCEDURE FOR DETERMINING RELATIVE DISTRIBUTIVE POSSIBILITIES.—Having outlined the principles underlying the determination of the relative sales opportunity for products having a general market, it is now possible to illustrate the procedure by means of a **concrete example.** In Fig. 4 is a chart of a hypothetical company which has its selling area divided into five large sales districts, each of which covers one or more states. The first column to the left gives the per cent of population each district has of the total population in the entire selling area, which may be a section of the country,

such as the New England States. Usually a concern of any considerable size sells in all the states. In this event the per cent of population in each district shows the ratio its population bears to the population of the whole country. The entire population of all the sales districts, whether they include part or all of the states, is represented by 100%. Similarly, in the last column is given the distribution of income by districts. District 1 has 25% of the total population and 15% of the total income. The 2d district has 10% of the population and 5% of the total income, and so on down through the list.

	Per Cent of Population	Group One	Group Two	Group Three	Group Four	Group Five	Group Six	Group Seven	Group Eight	Group Nine	Per Cent of Income
District 1.	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	15%
District 2.....	10	9.5	9	8.5	8	7.5	7	6.5	6	5.5	5
District 3.....	5	5	5	5	5	5	5	5	5	5	5
District 4.....	20	19.5	19	18.5	18	17.5	17	16.5	16	15.5	15
District 5.....	40	42	44	46	48	50	52	54	56	58	60
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Computing weights of the above factors are as follows:

Group One	9	Income	1
" Two	8	"	2
" Three	7	"	3
" Four	6	"	4
" Five	5	"	5
" Six	4	"	6
" Seven	3	"	7
" Eight	2	"	8
" Nine	1	"	9

FIG. 4. Chart Indicating Method of Determining Relative Sales Opportunity, according to Population and Income, for Products with Varying Markets

	Potential Distribution (1)	Actual Distribution (2)	Actual Sales (3)	Potential Sales (4)	(5)	Distribution of Sales by Districts After Estimated Increase is Added (6)
District 1	24.0%	22%	$ 2,200,000	$ 2,400,000 × 1.057692	=	$ 2,538,461
District 2.....	9.5%	10%	1,000,000	1,000,000 × 1.057692	=	1,057,692
District 3	5.0%	8%	800,000	800,000 × 1.057692	=	846,154
District 4.....	19.5%	20%	2,000,000	2,000,000 × 1.057692	=	2,115,385
District 5.....	42.0%	40%	4,000,000	4,200,000 × 1.057692	=	4,442,308
	100 %	100%	$10,000,000	$10,400,000		$11,000,000

FIG. 5. Chart indicating Potential Sales Opportunity, According to Population and Income, for a Particular Concern

By weighting these two factors, viz., population and income as indicated in Fig. 4, we get a fair measure of the relative possibilities for each district. This measure can be used as the basis for apportioning the company quota among the sales districts and sales branches. In Fig. 5 is an illustration of how the

quota of a hypothetical concern may be distributed on the basis of potential sales opportunity. In this illustration it is assumed that the products fall in group 1. Column 1 gives the per cent of potential distribution according to population and income. Column 2 gives the actual distribution of sales for each district. The 3d column gives the actual sales in dollars, while in the 4th is indicated what the volume of sales should have been had each district been developed in proportion to its sales opportunity. A comparison of the potential with the actual distribution as given in columns 1 and 2 indicates that the sales development in some districts is greater than in others, a condition which no doubt is typical with every concern selling in a national market.

The sales in district 1 are below the potential buying power by 2%; district 2 is ½ of 1% above; the 3d district is 3% above, while the 4th district is ½ of 1% above. However, the 5th district is 2% below. The potential sales volume in dollars should as indicated in column 4 be adjusted to sales opportunity.

Now suppose the increase in sales of this particular concern for the following year is to be 10% of $10,000,000, as given in column 3. What proportion, theoretically, should go to each district? Column 4 gives the volume of business that should have been done had the districts been developed according to their sales opportunity. Since an increase of $400,000 or 4% of additional sales over the preceding year has already been distributed, only $600,000 more needs to be apportioned to bring the total up to $11,000,000. By dividing $600,000 by $10,400,000 we get the per cent to be added to each district to absorb the estimated increase. Column 6 gives the respective amount of sales for each district after the 10% increase for the year has been added.

ADJUSTMENT OF SALES QUOTA TO POTENTIAL POSSIBILITIES.—Whether or not the actual sales quota should be adjusted to the potential distribution possibilities in the several districts of any particular concern as indicated by the weighting of population and income and the period in which the adjustment should be made, is a matter for the executives to determine. The formula indicates the sales opportunity, and this gives the management a **basis for formulating sales policies.** For various reasons, such as high freight charges, intensive competition, lack of capital, etc., some districts may not be as far developed as others, because the management may have deemed it more profitable to concentrate sales efforts in those territories which show greater immediate results. Therefore, even if the facts about the relative sales possibilities as indicated in Fig. 5 are known, those districts which have produced more than their proportion would be assigned a certain percentage of increase over the previous year's sales. Because of the goodwill established it would be no doubt economical to increase the sales in these districts to some extent.

In those districts where it is desirable **to balance sales volume with sales opportunity,** the adjustment should be made over a period of several years; for it would ordinarily be very difficult, particularly in normal times, to stimulate the sales of any individual business in one year's time, so as to exceed the previous year's record, without incurring a very heavy sales expense. Local conditions in each district should also be considered. A goal might, however, be set up with the view of making the adjustment over a period of years, adding on a certain percentage of increase each year. Simultaneously with the increase in volume, the selling expense for sales effort should also be increased.

In order to secure **practical operation of the formula** so as to serve as a basis for indicating potential distribution possibilities, **adjustments** will have to be made in some communities. Like every principle and procedure, it must be applied with common sense. On account of the climatic conditions in the extreme northern and southern states, consumption for certain types of com-

modities may be greater or less per capita than in the eastern and central portions of the United States. When this is found to be an important factor, a standard may be set up for the purchasing units in the central and eastern parts of the country, and those in the abnormal regions may be adjusted accordingly. A thousand people in the South may be equal to six hundred in the central part of the United States; or for some types of goods the ratio might be reversed. The proper ratios can be determined from past sales records and sales research.

In conclusion it should be noted that it is distribution that is being predicted in setting quotas as here described, and not the gross amount of business to be sold during any particular period. This procedure should serve as a basis for distributing or apportioning the company quota as previously explained above. This procedure is particularly applicable to those products which are generally distributed. The estimate of the company quota is based on other considerations, as has been previously explained. But given a specific amount of new business that a company desires to set up for its goal, the problem in quota-setting is to get the most equitable distribution of this amount among the several districts, branches, and salesmen's territories. Under the plan as outlined above it is possible to give each selling unit a goal that is equally difficult to attain. The quotas under this arrangement may be increased or decreased by a definite percentage and thus make the task for all selling units more or less difficult. But each unit is given an approximately equal load to carry. It is thus possible to make a direct comparison among the selling units as to the per cent of quota each attains.

Sales Cost Finding

In the early part of this section it was shown that volume of sales is an important factor from the standpoint of producing profit on the investment. The profitableness of a company depends, on the one hand, on the gross revenue it receives, i.e., on the receipts from sales, and on the other hand, on the amount of expense involved in securing them. What every aggressive manufacturer and distributor desires to do is to increase his sales so that the full plant capacity will be utilized. The operation of such a sales program not only involves a great deal of expenditure for soliciting business, advertising, etc., but also for taking care of the **overhead incurred in physical distribution.**

As a result of the great development of the production facilities within the last 25 years, together with the conditions growing out of the World War, there has been developed a tremendous capacity for manufacturing goods of all kinds, and coincident thereto a keen competition for markets. Expenditures for sales efforts have been increased to such an extent that in many lines it costs more to sell than to produce. The great problem confronting practically every sales manager today is to sell at a profit. There are few concerns which could not increase their sales by increasing their sales expense. But sales are desired only when profits will result. As pointed out before, in order to produce and sell most effectively there must be a **close co-ordination of sales and production.** There is a point beyond which it will not pay to extend the business, because the additional revenue from sales is more than absorbed by the increase in cost. Effective sales administration rests on a **proper analysis of sales costs and reports.**

SALES VERSUS PRODUCTION ACTIVITIES.—Because of the peculiar character of sales expenses and the circumstances under which they are incurred,

it is very important that they be closely considered and carefully analyzed in order to realize maximum returns from the sales operations. When control is not properly established, this class of expenditures in particular has a **tendency to increase unduly.** As compared with production, sales activities are largely of an intangible character. In the production end of the business we have physical processes which are repetitive and which are carried on within a limited area of operation. There is only one human factor, the operators of the machines. In selling there are two human factors to deal with, viz., the salesman and the prospective purchasers.

Sales methods are **only partially subject to standardization,** as they are varied necessarily by conditions of trade and competition. On account of the nature of the work the field sales organization is scattered and is only periodically under the direct supervision and personal touch of the executive. In general, the services received for the expense incurred by the sales department are of an intangible sort and difficult to appraise. Advertising, for example, is one of those items the direct benefit of which is very difficult to determine. The same is true of expenditures for salesmen's services in sales territories which are in the developmental stage. Similarly, the promotional activities of every sales organization are always more or less of a speculative type.

In the case of a purchase of physical materials to be used in manufacturing it is possible to correlate directly the merchandise obtained with the value of the finished product made from the materials. On the other hand, it is not possible to predict very accurately the number of sales that may be forthcoming as a result of certain expenditures for advertising space. Sales may be secured as a result of advertising and salesmen's efforts some time after expenditures for these items have been incurred. On account of this difficulty in appraising the results of sales expenditures, executives are likely to think that a certain amount of selling expense is necessary and should be incurred irrespective of the fact that direct results cannot be determined. There is a tendency not to examine critically enough the amount and nature of these expenditures.

Because of the **intangible character of sales activities** standards are more difficult to determine than in the plant operations. For example, it is possible to determine the amount of material and labor necessary to produce a certain article and then use this as a standard for estimating the quantity of materials necessary in producing that article. On account of various economic factors there is, however, no exact procedure for determining the amount of selling expense necessary to secure a dollar's worth of expense.

COMMON SALES COST PRACTICE.—Up to the last decade very little attention has been given to sales costs. Consequently we have no sales-cost accounting which in any way parallels the precision of unit-cost analysis as found in the production departments of some manufacturing concerns. Cost accounting treatises have been entirely devoted to the discussion of principles pertaining to production costs. In this field, methods pertaining to cost control have not been developed. The discussions on sales-cost technique are, indeed, fragmentary and have not yet found their way into treatises on cost accounting.

Instead of analyzing and allocating sales costs most concerns lump all their selling costs and consider them as a flat percentage upon the selling price. For example, the cost of advertising, salesmen's salaries, traveling expenses, and the so-called overhead items, are given lump-sum consideration, i.e., each of these items is expressed as a ratio of the sales price. Such figures are of little value, since the actual profit or loss by territory, by salesman, and by customers is not shown. In so far as possible a profit should be made on every one of these factors. It may never be possible to reach that goal, but proper analysis of

costs will at least indicate which of the above units are profitable and why. Not only that, it will show which are unprofitable and why, and thus will point the way to make each stand on its own feet.

If the entire output, for example, is sold to a few large distributors or consumers, the manufacturer's **problem of allocating sales costs** is not difficult, for then the real burden of sales-cost control falls on the distributors who sell to the retailers or consumers. When such a selling policy is followed it is quite proper to allocate the sales cost as a percentage of the selling price, for it is customary to bill jobbers at the list price less the jobbers' discount. The discount to the manufacturer is a selling expense allowed to the distributor for performing a selling function. Obviously, when such a method of marketing is followed, the manufacturer needs no elaborate cost system as a basis for effective sales administration. A great majority of the manufacturers do not limit their policy of selling to large purchasers and jobbers, but sell direct to retailers and consumers, and consequently need a more effective accounting system for the control of sales operations.

FLAT PERCENTAGE INADEQUATE AS A MEASURE OF SALES EFFICIENCY.—For several reasons a general ratio of selling costs to sales is inadequate as a measure for the effective control of sales costs. In the first place, it fails to indicate the efficiency or profitableness of the salesman or the territory. When costs are not allocated to territories, salesmen taken as a group may be profitable, but at the same time among them some may be consistent losers. The writer saw an analysis of sales costs made by a profitable concern in which one salesman whose sales were around $7,500 per month made a profit of only $100 for the company.

In the second place, it has a tendency to **emphasize volume of business at the expense of profits.** In other words, it has a tendency to measure sales success by the amount of goods sold rather than on the amount of profit produced. Volume of sales can neither be taken as an absolute measure of successful sales effort nor as a measure of profitableness. For example, customers are not all equally difficult to sell to; an order obtained for $500 does not necessarily involve a sales cost of $50 in case the ratio of the salesman's operating costs to sales happens to be 10% of his sales. A manufacturer selling his products to a national market in competition with other goods will for various reasons find it more difficult to sell in some territories than in others. A salesman may take considerable time to work up a small order which may not be repeated while a large order may be obtained through the mail at the cost of a postage stamp. Then, too, not all lines carry the same margin of profit. The salesman selling $10,000 of merchandise may be more profitable than his competitor whose sales are twice as great.

In the third place, the per cent of cost to sales leaves the sales manager without adequate statistics for **appraising the salesman's work in a particular territory.** When products of continuous consumption, such as food, clothing, stationery, supplies, etc., are sold direct to dealers or large consumers, data pertaining to the profitableness of individual accounts is very helpful in establishing correct sales policies. It is not only important to know to what extent a sales territory is profitable or unprofitable, but in the latter case there should also be evidences pointing out the cause of its barrenness.

Where manufacturers sell to jobbers, as many do, the problem of costing accounts is far less complicated. Unit sales are relatively large and frequent solicitation is not essential. Under this method of distribution the manufacturer usually employs two types of salesmen, the one calling on jobbers in their respective territories, and the other type being those, known as "missionary"

salesmen, who solicit orders for the jobbers among dealers. When this method of selling is followed, it is impossible to determine the cost of selling dealers, because the manufacturer does not carry their accounts on his books and has no knowledge of their volume of purchases. It is assumed that the volume of business secured from wide distribution is sufficient to offset the high cost of selling the small accounts in any community.

NEED FOR SALES-COST ANALYSIS AND REPORTS.—The progressive manufacturer understands the necessity of determining accurately the cost of manufacturing the various articles that make up his line. Of no less importance to him is the cost of marketing his products, not merely taking the field as a whole but in detail—which salesmen, branches and agencies are making money for him and which are not.

While it is true that the results of expenditures for advertising and sales promotion cannot be definitely determined, a careful study of these items in relation to the sales program will have the tendency to keep sales costs at a much lower figure and at the same time produce results equally as satisfactory. Reports on sales cost are essential in selecting the right method of selling. On the basis of reports on the salesmen's operating cost, the sales manager will be able to determine (1) whether the salesmen's territories are properly laid out for economical operation, (2) whether they are producing profits in accordance with their possibilities, (3) whether the salesmen are efficient. When sales branches are operated, there should be reports giving similar facts not only with reference to each branch as a whole but also to the territories comprising each branch. Such information is indispensable to sales management as competing firms are very active in making inroads in each other's business. Redistricting of territories and changes in the method of distribution need, therefore, be made from time to time. To direct salesmen most effectively it is necessary to have accurate knowledge of sales cost in every territory.

THE APPROACH TO THE ANALYSIS OF SALES COSTS.—Because of the different conditions under which concerns operate and the various types of products manufactured, it is impossible to give a single method which would apply equally well to all business. The discussion which follows will be confined to illustrating principles of allocating selling expenses for the purpose of **determining some unit cost** or measure which can be used as a standard for judging the operating efficiency of the salesmen, and the variation of cost from month to month. The first question to be decided is what unit of cost is to be determined. Is it desirable to get the selling cost and profit by lines of products, by salesmen, or sales territories, or some other unit?

COST OF SELLING BY LINES.—In manufacturing activities it is customary to determine the cost of each item so as to develop a manufacturing profit and loss by lines. This procedure cannot be applied very well to selling for several reasons. Except in an unusually simple business it would be exceedingly difficult to get an accurate measure of the sales effort required to sell each item of an entire line. This would be comparatively simple if the sales force were made up of specialists, each of whom confined his efforts to but one item of product. In practice the salesman sells the entire line; his selling effort to a large extent is measured by the number of calls and sales that he makes and the amount of net profit resulting therefrom. It is not likely that his expense or calls would be reduced if he carried one or two less. W. R. Basset, President of Miller, Franklin & Basset Co., says:

"It is more important to make sure that the selling price and the cost of every item carried by the salesmen are such as to make the item salable and

to leave a satisfactory manufacturing profit. We can quickly tell that item D, say, does not sell in a given territory as well as the other items. This will lead to an investigation which may show that the price is not right, that the buying habits of the territory preclude the sale of item D, that we are not covering that territory adequately with advertising, or simply that the salesman is not enthusiastic over the item. If the last, it may pay to offer an incentive to the salesman to push that item, or perhaps to fire him, if that cure be indicated. Whatever the reason, our reports have indicated the condition and our investigation has shown the cause. If it appears that item D is entirely unsalable there, and if the necessary sales expense cannot be borne by the remaining lines and leave a profit, we may decide to withdraw from that territory entirely."

The determination of selling cost by items is not so important as it might seem at first thought, for in selling it is essential to consider the purchaser's needs and desires. In certain industries it is necessary to furnish the dealers with a complete line even though some items in the line are not profitable. Then, too, the manufacturer with specialized equipment, whose output is limited to certain lines of products, must determine where he can sell at the lowest possible cost what his factory is best equipped to produce. In order to do this, he should so co-ordinate the sales and production program that the highest aggregate net profit will result. Some of the lines may just be burden carriers, i.e., they may be sold at a price which will probably just pay for the cost of material and overhead. Under such conditions nothing would be gained by dropping these lines so long as they do not produce a "dead" loss to the business.

The profit on the ordinary articles of commerce is essentially an **average attained on the unit sale to the customer.** Certain costs must then be averaged. While there are a few cases where the **cost per item** may be desired, in most instances the selling cost develops into a relation to the dollar of sales, i.e., the number of cents it takes to make a dollar sale, expressed in per cent. In those organizations where the advertising activities are general, it is impossible to allocate it to the salesmen's territory or customer's accounts except on an extremely arbitrary basis. Under such conditions the first two headings are sufficient. The problem of determining the profitableness of salesmen and territories is simply a matter of **allocating direct and indirect expenses.** The direct expenses can very readily be assigned to each salesman. The indirect expenses must be distributed on some basis. Various methods of apportioning the selling overhead will now be discussed.

CLASSIFICATION OF SELLING EXPENSE.—The determination of the profitableness of salesmen's territories and customer's accounts on a reasonably accurate basis contemplates a careful classification of the expenses incurred in each salesman's territory. The number and nature of the expense items will depend upon the type of business, i.e., the products it sells, and its policy of sales administration. Ordinarily we can consider the items under three general headings as follows:

1. Salesmen's Direct Expense.—This includes salesmen's salaries, commissions, traveling expense, supplies, etc.

2. Management or General Selling and Office Expenses.—The items included under this heading in the home office type of sales organization, where all salesmen travel from the home office under a sales manager, are: salaries and expenses of the sales manager, his assistant, stenographers, and other office force employees engaged in gathering and maintaining sales data,

records; also postage, depreciation on office equipment, telephone, and telegraph, etc.

When the **sales organization is decentralized** and district branch offices are operated, there is in addition to the cost of maintaining the home office the expense of maintaining the **local sales offices.** The expense items vary with the functions performed by the branches. The main items included in this heading in a sales branch are manager's salary, rent of office, salary of clerks, postage, stationery and supplies, telegraph and telephone charges, depreciation of office, delivery equipment, etc.

3. Special Advertising.—This includes expenditures for special advertising in the sales territories in newspapers, moving picture houses, local newspaper allowances to customers, advertising material, cuts, etc., distributed to dealers or agents.

PROFITABLENESS OF SALESMEN OR TERRITORIES, AND CUSTOMERS.—From the preceding discussion it would seem that the important thing to know is the **profitableness of salesmen and customers** rather than the cost of selling by lines. This conclusion is confirmed in the quotation given below from a sales manager of a national sales organization which has made a study of distribution.

"If we know that we are making some profit on the business we do with each customer, and that the amount of net profit we derive from each customer is satisfactory, we would not need to worry a great deal, even though it could be shown that we are losing money on some of the material we sell them or on some of the small orders they give us." (O. D. Street, General Sales Manager, Western Electric Co.)

Whether or not costing of customers is important depends on the method of selling and the type of commodity sold. The manufacturer who sells his goods to jobbers and operates a sales force of "missionary" salesmen who call on dealers to stimulate the demand for his goods, would not attempt to determine the cost of each retail distributor, as the company carries or has only a record of the jobbers' accounts. It is the jobber who carries the retail accounts under such a system of selling. Neither is the costing of accounts of those concerns selling one-time specialties, such as bonds, vacuum cleaners, office appliances, insurance, etc., important. Such concerns are, nevertheless, vitally interested in the productiveness of sales by territories.

PROFIT AND LOSS BY SALESMEN AND TERRITORIES.—The steps involved in determining the profit and loss by territories may be summarized as follows:

1. Credit the territory or salesman with the gross amount of selling profit his sales produced during a given period.
2. From the gross selling profit deduct the salesman's direct expense.
3. Deduct "special advertising" expense if advertising of this type has been done.
4. Deduct a pro-rata amount of "management or selling overhead."

The salesman's direct expense, salary, commissions, traveling expense, bonus, etc., can be directly allocated to the salesman or the territory in which he operates. The difficult problem arises in connection with the equitable **distribution of the selling overhead,** that is, the sales office expense. These items cannot be charged directly to the territories but must be allocated on some basis. It is highly important that this overhead be apportioned on a

fairly accurate basis in order to show the true performance of salesmen and territories.

Three methods of apportioning the overhead will be explained. They are:

1. On the basis of sales.
2. Equally among the sales territories or salesmen.
3. On the basis of a predetermined sales quota.

SALES VOLUME AS BASIS OF APPORTIONING OVERHEAD.—As the distribution of manufacturing costs on the basis of direct labor usually leads to incorrect results so the apportioning of selling expense on the basis of sales volume gives **results equally unsatisfactory.** When selling overhead is apportioned on the basis of sales, total sales for the territory of the branch is taken as the basis, and the percentage of overhead assigned to each salesman is the percentage of his sales to total sales, irrespective of the sales quota. For example, if a branch has ten salesmen and its sales amount to $100,000 for a given period, and salesman Smith sells $40,000, he would be charged with 40% of the total general overhead, even though his quota for the period was only 20% of the total sales. The more a salesman sells, the greater will be the amount of overhead with which he will be charged.

SELLING OVERHEAD DISTRIBUTED EQUALLY AMONG SALESMEN.—On the theory that each salesman requires ordinarily about the same amount of supervision and benefits about the same from the efforts of the management, it is argued by some that overhead might for practical purposes be apportioned equally among the salesmen. If, for example, the overhead amounts to $1,000 for a given month or period, and there are ten traveling salesmen, $100 would be charged against each salesman or territory as the proper share of overhead.

The chief argument in favor of this method is that it is easy to administer. In some businesses it will probably give results sufficiently accurate for practical purposes. In case of certain new territories which require an undue amount of the sales manager's time, it might be advisable for the manager to keep tab on the amount of time spent in supervising each territory. This can be done by having him make an informal note of the time consumed in directing the activities of each territory.

ADVANTAGES AND DISADVANTAGES OF THE SALES AND SALESMAN PRO-RATA METHODS.—As is obvious from the discussion of this and the first method mentioned of apportioning overhead the chief advantages lie in their **simplicity of application.** The practice of taking sales as a basis for determining expense ratios is very popular among accountants and sales executives. It is easy to understand and no predetermined amounts of expenses are required. Both methods are applied at the close of the cost period, when the actual sales and expenses have been incurred. The clerical labor necessary to make the computations is small. In certain types of sales organizations, when salesmen are all practically equal in efficiency (a condition which seldom if ever exists), these methods may give fairly accurate results.

The **principal objection** to these methods is that in most cases they fail to reveal the actual status of a territory or salesman with regard to profit or loss. Take the first method which provides for the apportioning of overhead on the basis of sales. It is illogical, for if a salesman sells twice his quota, there is no justification for charging him with twice its pro-rata of overhead. The cost of overhead does not increase in proportion to sales, particularly after the quota has been attained. The distribution of overhead as a percentage of sales, futhermore, does not locate the real source or extent of territorial profit and loss. The territory which is really unprofitable is the one which fails to reach

the point necessary to its proper share of the selling overhead. If the overhead in such a territory is apportioned on the basis of sales made therein, the amount it should be charged with is decreased and the lack of its profitableness is obscured. In effect, this method has the tendency to overstate the profit or loss of a poor territory and to understate the profit of a good territory which shows a rapid increase in sales.

As an illustration, suppose that of two territories which are valued approximately equally as to sales possibilities, one produces twice as much sales volume as the other. If the first is charged with twice as much of the overhead the true performance of the two salesmen will be incorrectly stated. Obviously, according to this procedure, if one of the units sold nothing at all during the period, it would be charged with no overhead.

This can be illustrated by taking a simple example of a company operating in several states with a sales organization of the home office type in which the salesmen are under the direct supervision of the sales manager and travel away from the city where the factory is located. Each salesman has a separate territory which may be a state, several counties, or a portion of a large city. Assume that there are ten salesmen in the organization and they sell during a given month $60,000 of goods, incurring a selling cost of $6,000. Dividing the selling expenses by the sales shows a sales cost of 10%, i.e., the average cost of selling a dollar's worth of goods in each territory is 10% on the sales price.

Suppose the gross selling profit was $20,000. After deducting $6,000, the amount incurred in selling, a net selling profit of $14,000 is left, and an average net profit on the sales in each territory of 23 1/3%.

Now assume that of the $6,000 selling cost $5,000 was paid for salesmen's commissions and traveling expense, and $1,000 constituted selling overhead. How much of the overhead should be borne by each salesman if the sales of each were as follows:

Total Sales	1	2	3	4	5	6	7	8	9	10
$60,000	$4,000	$3,500	$5,000	$4,500	$7,000	$7,500	$8,000	$6,500	$8,000	$6,000

By distributing the overhead of $1,000 on the basis of sales, i.e., the ratio each salesman's sales bears to the total amount $60,000, the following amounts result:

Total Amt.	1	2	3	4	5	6	7	8	9	10
$1,000	$66.67	$58.33	$83.33	$116.67	$75.00	$125.00	$133.34	$108.33	$133.33	$100.00

This procedure, though easy to administer, is not a true measure of the relative profitableness of the salesmen. So far as the salesmen are concerned it leaves much to be desired. For example, if the salesmen are paid a bonus on the net selling profit of their territory, in addition to their commission and salary (not an uncommon arrangement in actual practice), this procedure would have a tendency to penalize the good salesmen and to favor the poorer ones. For example, suppose territories of salesmen No. 1 and 7 were both approximately equal as to sales possibilities. Looking at the sales figures, however, we find that No. 7 sold twice as much as No. 1. By distributing overhead on the basis of sales as indicated above, the net operating profit of territory No. 7 is understated while that of No. 1 is overstated. Under this procedure no charge would be made for overhead to a territory in the event that no sales were made during a given period. In case these territories are sales agencies or branches and general sales overhead is apportioned as above, equally incorrect conclusions as to the profitableness of each will follow.

APPORTIONING SELLING OVERHEAD ON THE BASIS OF PREDETERMINED SALES QUOTAS.—This method is similar to the one discussed in the foregoing except that the overhead is apportioned on the basis of predetermined sales quotas. Each territory is charged with overhead in the ratio that its quota bears to the total sales quota of the branch, or the entire sales organization if the salesmen operate from the home office. For the purpose of control this **method is superior** to the method outlined above. In the first place, it presupposes a carefully computed sales quota for each territory. The sales quota then becomes the basis on which the estimated overhead is to be apportioned to each territory. Obviously, allocation on a basis of sales cannot be made until the end of a period and consequently it does not provide figures which are available sufficiently early for the most effective control. As indicated above, under this plan the branch sales quota is taken as the basis and the proportion of that quota assigned to each salesman establishes the proportion of overhead that is to be borne by him.

Sales quotas, as has been explained, have a definite relation to the amount of expense to be incurred during a particular period. They indicate the amount of sales that should be reached to make the respective territories fully profitable. When careful records of sales costs are kept, the results under this method can be made available much earlier than under the other two methods, since the sales quotas are known before the sales are made. Accordingly, this method **provides check-ups** from which the sales or branch manager can formulate plans to bolster up those territories and salesmen who are not making their quotas and consequently contributing less than their proper share of profit to the concern.

In organizations where fairly scientific sales quotas can be determined this method is probably more equitable than either of the other two outlined in the preceding pages. While no method can be devised which can be said to be absolutely accurate, the distribution of selling overhead on the basis of sales opportunity is theoretically sound, as the territory should be the basis for proper sales costing. As already noted, the distribution of overhead on the basis of the sales quota contemplates fairly accurate territory valuation. This is very important, as little can be done to allocate selling expense on a fairly accurate basis unless there is a reasonably definite estimate of the amount of business a territory should produce. Not infrequently "star salesmen" when shifted to another district prove to be complete failures.

COSTING CUSTOMERS' ACCOUNTS.—The foregoing analysis of selling costs makes it possible to get the unit cost of selling individual accounts. The **selling expense by accounts** can be resolved into three elements as follows:

1. Salesman's cost, which includes the salesman's direct expense and a portion of the management expense.
2. The cost for special advertising.
3. The cost of clerical and warehousing services.

The extent to which it is desirable to give the above costs on accounts in detail depends upon the conditions of the individual business. Most companies probably would not find it practical to attempt to allocate expense to customers' accounts. The **salesman's cost per call** in many businesses would seem desirable. Besides serving as a measure for establishing the profitableness of an account, it may also be used as a unit of selling expense which can be compared with a normal or standard. This affords a splendid check on the salesman's activity. For example, a normal expense per call for each territory can be developed as a **standard cost.** This standard can then be compared with actual performance

from month to month. When significant variations occur, proper explanations should be made of the cause. In case the actual cost is higher than the standard, one of two things is evident—either the salesman is making fewer calls, or else he is spending more than normally.

The selling cost per call can be determined by dividing the salesman's cost for a month by the number of calls he made during that period. By adding to this the direct cost of advertising and the cost for "clerical and warehousing service," the **total cost of handling accounts** is obtained.

The standard cost per call in most sales offices or districts will not necessarily be uniform or nearly so. The method of traveling, whether by train or automobile, the size of the towns and cities, and the distances between them, all directly modify the number of calls a salesman can make. Accordingly, there is a variation in the traveling expense in practically each territory.

SECTION 31

FIDUCIARY RELATIONS

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SECTION 31

FIDUCIARY RELATIONS

DEFINITIONS.—The English word "fiduciary" is derived from the Latin *fiducia*, faith. It is defined in our dictionaries as "a person who holds a thing in trust," and **attorneys, guardians and trustees** are cited as examples of fiduciary relationship. There are many situations arising in everyday life in which a fiduciary becomes a useful or even a necessary instrument for the effective transaction of business. The Anglo-Saxon words **trust** and **trustee** are practically synonymous in meaning with fiduciary and are more commonly used.

A fiduciary relationship or trust may be either **express or implied;** that is, it may be expressly created by a will or a deed, or it may arise from an equitable consideration of the acts or situation of the parties.

The following are some of the **usual forms of fiduciary relationships:**

Executor of the will of a deceased person.
Administrator of the estate of a deceased person.
Trustee under the will of a deceased person.
Trustee under an agreement or deed of trust.
Guardian of the property of a minor.
Guardian or committee of the property of an incompetent person.
Trustee under a corporate mortgage.
Transfer agent, registrar or fiscal agent for corporations.
Depositary under voting trust agreements.
Escrow agent.
Receiver of the property of an insolvent or liquidating corporation.

Estates

DUTIES OF AN EXECUTOR AND OF AN ADMINISTRATOR.—The duties of an executor and of an administrator are essentially the same. The executor or administrator is said to be the **personal representative** of the decedent, all of whose personal estate vests in him. All of his **duties** are comprehended under three headings: (1) collection and liquidation of assets; (2) payment of debts, administration expenses, taxes and legacies; (3) distribution of the residue of the estate to the persons entitled to receive it. The only difference between the two functions is that an executor is governed by the terms of a will, which may give legacies to persons or institutions entirely outside of the family of the testator, as a person who makes a will is called; while an administrator is governed by the **law of intestate succession.** A person who dies without leaving a will is said to be **intestate** and his property is distributable among his heirs and next of kin in proportions fixed by law, which differ somewhat in different states. In case the executor named in a will dies or for any other reason fails to complete the settlement of an estate, some

other person must be appointed to finish his work. This person is called an **administrator c. t. a.** (*cum testamentum annexo*) or **administrator with the will annexed,** and he is guided by the terms of the will, just as if he had been named therein as executor.

There is still a third kind of administrator—a **temporary administrator.** This is an officer appointed by the court to take temporary charge of the estate of a deceased person when an executor or a permanent administrator can not legally qualify to act without undue delay, such as might occur in case of the contested probate of a will, or the absence from the jurisdiction of parties whose consent to the probate is necessary, when such delay would work injury to the estate. The authority of a temporary administrator is limited to the preservation of the assets of the estate. He cannot dispose of them or pay any bills, except under the direction of the court by which he was appointed. Sometimes the person named as executor in a will is appointed temporary administrator pending his qualification as executor.

QUALIFICATION OF EXECUTOR OR ADMINISTRATOR.—While the authority of the executor is derived from the will and that of the administrator from the intestacy law, neither officer can take possession of or deal with the estate of his decedent until he has been authorized to do so by a **court having probate jurisdiction.** In some states this is called a **"probate court,"** in others a **"surrogate's court."** Sometimes another court is charged with this responsibility. The will, if there is one, **must be filed and proved** in accordance with the law of the state of which the testator died a resident. The surrogate or other proper public official then issues to the executor a certificate of the fact that the will has been admitted to probate and that the executor has duly qualified. This certificate is called **"letters testamentary,"** and is a testimony to all the world of the executor's authority.

In case the decedent left no will, this fact must be proved in accordance with the law and practice of the jurisdiction, and the court will then issue **"letters of administration"** to some person who will undertake the settlement of the estate. The law differs somewhat in different states, but the general practice is to grant letters to the nearest relative, who is capable and willing to act, in a certain order of preference. A husband would be entitled to administer upon his wife's estate, a wife upon her husband's, the eldest son upon the estate of his father or mother, etc. In case any of the relatives entitled to preference are not capable or desirous of acting, the next in order of preference would be appointed. If there is no relative who can or will act, a creditor may be appointed as administrator, or the **public administrator** will be called upon to take charge of the estate.

The law usually requires that an executor or administrator shall **furnish bond** for the faithful performance of his duties. The amount of the bond is determined by the amount of the estate. Formerly individuals became surety for the executor or administrator, but now the practice of securing bonds from surety companies has become almost universal. A testator may provide in his will that his executor shall not be required to give any bond, though the surrogate may nevertheless require one if the law so provides. An administrator is always obliged to give a bond.

An executor or administrator **may resign** with the consent of the court, and may be **removed by the court** for improper management of the estate. If he resigns or is removed or dies his successor is appointed by the court.

REMUNERATION OF EXECUTOR OR ADMINISTRATOR.—The executor or administrator is compensated by **fees or commissions,** which are fixed by

law. These differ in different states. They usually are **fixed upon the amount of the estate** and sometimes take into consideration the character of the estate and the nature of the duties devolving on the executor. For example, in the **State of New York** a fixed commission is allowed at the following rates:

5% on the first	$ 2,000
2½% on the next	20,000
1½% on the next	28,000
2% on all over	50,000

In the **State of New Jersey,** the rates are as follows:

"Not exceeding

7% on the first	$ 1,000
4% on the next	4,000
3% on the next	5,000
2% on all over	10,000

"The commissions of executors, administrators and trustees in any estate where the receipts exceed the sum of fifty thousand dollars, shall be determined by the orphan's court on the final settlement of their accounts according to the actual services rendered, not exceeding five per centum on all sums which come into their hands."

It will be seen that in the first case, the executor is not entitled to receive more than a certain sum no matter what the work and responsibility involved in the settlement of the estate, while in the latter case the court has authority to allow compensation for unusual services up to a fixed maximum amount.

HANDLING OF PERSONAL AND REAL PROPERTY.—When an executor or administrator has qualified and received his certificate of authority from the court, his first duty is to **take possession of the personal property** of the decedent and arrange for its safekeeping. He should have **an inventory and appraisal** made by competent appraisers, and **record all his transactions** in proper books of account. Bank accounts of the decedent should be transferred to a new account in the name of the estate, and securities and jewelry should be put in a safe deposit vault in the name of the estate. Particular care must be taken not to mingle the money or valuables of the estate with the personal moneys and effects of the executor or administrator, who will be held strictly accountable for them. All **perishable assets**, and all **stocks and bonds,** except such as are specifically bequeathed, should be converted into cash without delay. Otherwise in case of loss incurred by holding them, the executor or administrator will be held personally liable.

Real property does not pass to an executor unless the will gives him authority over it, but vests in the **devisee** under a will or the **heirs-at-law** of the decedent if there is no will. There may be circumstances, however, in which an executor or administrator would be required to see to the preservation or insurance of real estate until the devisee or heir shall be advised of his inheritance and have an opportunity to take possession of it.

PAYMENT OF DEBTS.—After the personal property has been taken over and inventoried, the next duty of the executor or administrator is to ascertain and pay the debts of the decedent. Out of the first funds which come into his hands, he pays the **funeral expenses,** which are preferred claims. The law usually provides for **notice to creditors** by advertising for a period of say 6 months, the advertisement calling on all persons having claims against the decedent to present them to the executor or administrator at his place o

business before a certain date. Unless the executor or administrator has personal knowledge of the correctness of claims presented, he should require proof of their justice by the affidavit of the claimant. Upon the expiration of this period of advertising, or of such other time as the law may prescribe if no notice to creditors has been published, the debts should be paid. In case the estate is not sufficient to pay all of the debts in full, they must be paid pro rata after provision has been made for the payment of the expenses of administration.

PAYMENT OF LEGACIES.—After provision has been made for the administration expenses and the debts, legacies must be paid. The period allowed for the ascertainment of debts is usually one year, or if a creditors' notice has been advertised, six months. Legacies cannot safely be paid before the expiration of this period, but sometimes an executor can be reasonably sure that the personal estate is ample to pay all of the expenses and debts and is willing to pay a legacy wholly or in part at an earlier date and to personally assume whatever risk there may be in so doing. In case a legacy is paid before the date when it becomes due, it should be **discounted at the legal rate of interest,** because the **residuary legatee** is entitled to the interest earned by the whole estate during the period fixed by law for the ascertainment of debts. The same principle applies in case an administrator shall make a **partial distribution of the estate** of persons entitled to share in the estate of a decedent who has left no will.

INHERITANCE TAXES.—An important duty of an executor or administrator is the payment of inheritance taxes or death duties. These are taxes imposed by law on the right of a decedent to transmit or of the legatees or next of kin to receive the property of a deceased person. The nature and amount of the taxes vary in different states. In the United States there is also an **estate tax** levied by the federal government on the estate as a whole with an exemption of $50,000, allowed to residents. For the purpose of fixing these taxes the estate must be inventoried at its value as of the date of the death of the decedent. This **inventory** must include all the personal property and also all real estate within the United States. It is filed with the taxing authorities and must be satisfactory to them as to values. Both the federal and state governments appoint **official appraisers** to review the inventories and fix the taxes. The executor or administrator may not distribute any personal property until the tax thereon has been fixed and paid or provided for. In the case of **stocks in corporations,** the corporation is forbidden to transfer the stock out of the name of the decedent without the permission or "waiver" of the taxing authorities of the state in which it is incorporated as well as of the state in which the decedent was domiciled at the time of his death. Waivers will be issued by these states on the payment of the taxes, if any, which are due on the transfer of the stock. Most of the states do impose such taxes. **Income taxes** must be paid by the estate, just as by an individual, and the income tax returns filed by the decedent during his lifetime should be looked up to make sure that any additional tax liability is discovered before the settlement of the estate.

ACCOUNTING AND DISCHARGE.—After the executor or administrator has collected all the personal property and converted it into cash, has had the inheritance taxes fixed and paid, and has paid all the debts of the decedent, he proceeds to render his **account to the court** from which he derives his authority. The account must contain a full statement of all moneys and personal property which have come into the hands of the executor or administrator, all payments for funeral expenses, taxes, debts, administration expenses and legacies, all property sold or otherwise disposed of, and all profits and losses incurred in the

course of the administration, and must show the balance remaining in the hands of the accountant to be distributed to those entitled thereto. **Notice of the filing of the account** must be given to all persons interested in the estate. When the account has been approved by the court, a decree will be entered accordingly, fixing and allowing the commissions of the executor or administrator and discharging him from any further responsibility for all matters embraced in the accounting. It sometimes happens that other property is discovered after an estate has been supposedly fully administered and the executor or administrator discharged. In such a case the executor or administrator, unless his letters have been revoked, must assume charge of the **newly discovered assets** and distribute them to the persons who are entitled to receive them. The administration of an estate requires the advice of a lawyer, whose services are paid for by the estate.

Trusts

TRUSTS EXPLAINED.—A trust is the relation which exists where the **legal title to property** has been given to one person (**the trustee**) for the benefit of another (**the beneficiary**). A trust may be created to provide an income for the support of dependents, the education of children, the maintenance of charitable or educational institutions, or some other desired object. Trusts may be either express or implied. **An express trust** may be created by a deed or agreement, by a declaration or by a will. When created by a deed or a declaration, it is called a **voluntary or living trust,** as distinguished from a **testamentary trust,** which is established by a will. A living trust may begin to operate immediately under the observation of its creator, who may reserve the right to modify or revoke it if he desires. A testamentary trust takes effect upon the death of the maker of the will. **An implied trust** is a trust raised by implication of law as a result of the acts or situation of the parties.

The creator of a voluntary or living trust is called the **grantor, donor, settlor or trustor.** The creator of a trust by will—formally described as a "last will and testament"—is called the **testator.** If the trust is to continue during the beneficiary's lifetime, he may be termed a **life beneficiary,** or, if the fund consists of real estate, the **life tenant.** A person named to receive the principal when the trust terminates is called the **remainderman.**

CREATING A TRUST BY AGREEMENT (OR DEED OF TRUST).—Either real estate or personal property, or both, may be placed in a **trust fund.** Any person may set up a trust under a simple agreement which any competent lawyer can prepare, directing how the fund shall be invested, to whom income from it shall be paid, and when and to whom the principal shall be paid when the trust terminates. When a person has decided upon the amount of a trust he wishes to establish, upon its terms and conditions, and upon the person or corporation he desires to act as trustee, he should have his attorney prepare a **trust agreement** setting forth all necessary provisions. This preferably should be done in conference with the trustee, to insure that the trust is of a kind that he is willing to accept and administer. The trust agreement is signed in duplicate by both the creator of the trust and the trustee, each of whom retains one of the duplicate originals. At the same time the cash, securities or real estate which forms the subject of the trust is transferred to the trustee. This completes the transaction. The trust is in existence, and thenceforth it is the duty of the trustee faithfully to carry out the terms of the agreement.

TRUSTS UNDER WILLS.—There are various kinds of trusts under wills. Some persons, to insure to their families or others income which cannot be taken

away from them, provide for the creation of trusts in their wills. These trust funds may be in addition to bequests left outright which the beneficiaries may invest or use without restriction.

Sheltering Trusts.—It is possible, also, for a husband to provide a separate and certain income for his wife, or for parents to assure the support of their children, at the same time relieving them of the care of investments and shielding them from dangers inherent in their inexperience and the mistakes of incompetent advisers, by establishing an appropriate trust, either by agreement with the trustee during their lifetime or by a will. Trusts of this character appropriately may be called **"sheltering" trusts.**

Charitable Trusts.—Trusts for charitable, religious, educational, literary or scientific purposes may be **of perpetual duration,** with a designated institution or an indefinite number of persons constituting a class of the public as continuous beneficiaries of the income. A trust of this kind may be established for the benefit of a college, a hospital or a missionary society; to provide means of education for students; to relieve the poor of a certain community, or for a variety of other purposes similar in kind.

Insurance Trusts.—In recent years the **life insurance trust** has come into more frequent use. In this form of trust, the trust fund is provided by the proceeds of insurance policies on the life of the creator. The policies are made payable to the trustee as the beneficiary, and the proceeds are collected by the trustee when the insurance falls due, either during the lifetime of the insured, if the policies are in endowment form, or at his death, if they are ordinary life policies. In a trust of this kind the trust agreement provides for the investment of the fund, the payment of the income to the beneficiaries and the final distribution of the principal. A variation of the life insurance trust, called a **funded insurance trust,** has been extensively used in some states. In such a trust the creator deposits with the trustee, in addition to the insurance policies, securities from the income of which the insurance premiums are to be paid. In drafting an agreement for this kind of trust, care must be taken to see that it does not provide for any accumulation of income which may be unlawful in the state in which it is to be executed.

Trusts for Emergencies.—As no man with certainty can foresee all that the future may bring forth, so no one can be sure that in establishing a trust he has specifically provided for all contingencies in the lives of the beneficiaries. Provision can be made, however, for their unforeseen as well as their anticipated needs, by authorizing the trustee, in case of emergency, to make **use of principal** in addition to income, if necessary. If, for example, a man feels that the income from a trust fund, though adequate for the ordinary needs of his children, probably will be insufficient to meet the expenses of higher education which they may need, he may give the trustee discretion to use part of the principal during the years of this extra expense. Likewise, he may authorize the trustee to use part of the principal to pay for medical attendance, to defray hospital expenses or to meet other emergencies, and thus relieve his beneficiaries of anxiety under circumstances in which the income alone would be too small for their needs.

TRUSTS IN CONTEMPLATION OF DEATH.—Trusts often are created by persons who wish to dispose of part of their property while living, so that the beneficiaries can enjoy the income without the burden of management for which they may not be fitted by experience. If a trust of this kind is made "in contemplation of death," or to take effect upon the death of the maker, or if the maker retains such rights of direction and control over it as to negative the

idea that it is an absolute gift, the **trust deed** will be treated as if it were a will, and the trust fund will be subject to inheritance taxes as part of the estate of the maker. The **Federal Estate Tax Law** says that any trust or gift of this kind made within two years before the death of the creator shall be presumed to have been made in contemplation of death, and therefore shall be considered as a part of his estate for the purpose of taxation. The presumption, however, may be rebutted.

REVOCABLE AND IRREVOCABLE TRUSTS.—A voluntary trust may be either revocable or irrevocable. That is, the creator may reserve the right to revoke and terminate it at his pleasure, or he may make it an absolute, irrevocable gift. The better form to use depends upon the circumstances of each particular case. A testamentary trust cannot be revoked or changed after the testator's death.

LIMITATION TO LIVES IN BEING.—Trusts for the benefit of individuals are limited as to duration in all jurisdictions which follow the principles of the **"common law" of England,** as do most of the states of the United States. The courts of England were always opposed to tying up property for too long a time. They developed through their decisions two great rules—the **rule against perpetuities** and the **rule against restraints on alienation.** These rules are so closely related that it is hard to separate them. The common law rule against perpetuities was to the effect that a gift was void if the vesting of title was postponed for a longer time than a life or lives in being and 21 years. Nearly 100 years ago New York State cut down the limit to two lives in being and the minority of a third life. This limitation has since been adopted in many of the states in which comprehensive statutes or "codes" have been enacted declaring or abrogating or in some respects modifying the principles of the common law.

ACCUMULATION OF INCOME.—In New York, no trust may be made for the accumulation of income, except where the beneficiary is a minor. In such a case, when the beneficiary becomes 21, the accumulated income must be paid to him. In some of the other states there is no such restrictions on the accumulation of income and income which is rightfully accumulated and added to the principal loses its character as income and becomes principal.

DISCRETION VESTED IN TRUSTEE.—Trusts are sometimes established to protect inexperienced or improvident persons from the consequences of their own ignorance or extravagance. In cases of this kind, the trustee is often empowered in his own discretion either to pay the income direct to the beneficiary or to apply it for his use and support.

ASSIGNMENT OF INCOME.—In order to carry out the purpose of the donor to provide an income for the beneficiary, it is proper to include a provision in the trust that the beneficiary shall not anticipate the payment of the income, and that neither the principal nor the income shall be assigned or be liable for his debts. In some states this **restraint on the alienation of income** is provided for by statute.

INVESTMENT OF TRUST FUNDS.—It is the trustee's duty to keep all trust funds invested and he would be charged with interest for any unreasonable delay in making investments. The creator of a trust may give definite instructions as to the character of investments to be made by his trustee, or may leave this to the trustee's discretion without restrictions. Unless it clearly appears from the language used that the trustee is to be absolutely free to exercise his own judgment without limitation to the so-called **"legal" securities,** he will be restricted in his choice of investments to securities which are approved

by law as proper for trust funds. In general, these are the same that savings banks are permitted to purchase.

What kind of investments are proper for trustees varies in different states and countries, being determined in some jurisdictions by statute and in others by the decisions of the courts. For example, in **New York,** trustees who are limited to legal securities may invest only in first mortgages on unincumbered real estate to the extent of two-thirds of its appraised value, in certain first mortgage guaranteed bonds, in U. S. government bonds, New York state municipal bonds and the bonds of nearly all the other states and of most cities of the United States of more than 45,000 population. This is a good example of a jurisdiction which prescribes by statute the class of securities which trustees may purchase if they are not specifically exempted from the legal restrictions. An example of the rule in jurisdictions where the statute law does not prescribe specific classes of investment, is found in the state of **Massachusetts.** There the courts hold that in addition to such securities as are allowed to trustees in New York, a trustee may make such investments as a prudent man would make in the handling of his own funds. A leading court decision on this point (*Dickinson's Appeal*, 152 Mass. 184) says:

"Our cases, however, show that trustees in this Commonwealth are permitted to invest portions of trust funds in dividend-paying stocks and interest-bearing bonds of private business corporations, when the corporations have acquired, by reason of the amount of their property and the prudent management of their affairs, such a reputation that cautious and intelligent persons commonly invest their own money in such stocks and bonds as permanent investments."

Safety the First Consideration.—While it is the duty of a trustee to obtain in his investment of trust funds as high a rate of income for his beneficiary as he consistently can, his first consideration must be the **safety of his principal.** As, in the very nature of things, not all kinds of investments are equally sound, it is impracticable in this discussion to draw a line between securities that are good investments and those that are not good. Nevertheless, it is possible to generalize briefly on a few classifications.

Common Stocks.—Trust funds should never be risked directly in a business venture. Common stocks of corporations, therefore, are not usually considered proper trust investments.

Preferred Stocks.—Preferred stock offers better security than common stock, particularly if the corporation has no bonded debt and if the preference includes an agreement that its property shall not be mortgaged without the consent of the preferred stock.

Bonds.—A mortgage bond offers still better security, as claims of creditors come ahead of preferred stock.

Interest versus Safety.—Generally speaking, the rate of interest obtainable on an investment reflects inversely the degree of its safety, and stocks pay a higher return than mortgage bonds because of the relatively greater risk involved. Creators of voluntary trusts, however, often place certain stocks in trust, or specifically authorize their trustee to buy stocks because they believe them good investments.

Discretion of Trustees.—There seem to be sound reasons for not limiting trustees strictly to the class of investments deemed proper for savings banks. Savings banks seek to earn only a limited rate of interest for their depositors. A trustee, on the other hand, must have regard for the interests of both the life

beneficiary and the remainderman, and if he is prudent he may safely be allowed broader discretion than is given by law to savings institutions.

Dividends.—Usually, preferred stock of a corporation is entitled to dividends at a certain limited rate. The common stock receives the rest of the profits, except that part which is applied to the accumulation of a surplus for working capital or as a reserve against periods of bad business. If, for any reason, the corporation decides to distribute a part of this surplus, an extraordinary dividend is declared, either in cash or new stock. Where stock in the corporation constitutes part of a trust fund, it is not always clear whether a **dividend** of this kind is **to be treated as principal or as income.** The courts frequently have been called upon to decide this question as it has affected specific trusts. The **rule in New York** is that in the absence of provisions in the trust agreement to the contrary, ordinary cash dividends belong to the life beneficiary of the trust, and extraordinary dividends representing accumulated profits, whether distributed in cash or in the form of stock, are to be apportioned between principal and income in the proportion in which the profits distributed were earned before and after the trust was created. This rule is based on the principle that the trust fund must not be reduced below its original amount by payments out of principal to the beneficiary, and that the beneficiary must have the benefit of all the income. Sometimes, however, the creator of a trust desires not to have extraordinary stock dividends apportioned, but added to the principal, and he may provide for this in the trust instrument in the absence of any statutory prohibition. The law of the state in which the trust is to be executed should be consulted on this point.

COMMISSIONS OF TRUSTEES.—A trustee is entitled to reasonable compensation for his services. In many states this is fixed by law. In the absence of a statute the amount to be allowed would rest with the discretion of the court. The **compensation of a testamentary trustee** is fixed by law in New York and is the same as that of an executor. It is paid in the form of a commission on the sum of money or the value of the property received and disbursed, at the following rates:

5% on the first $ 2,000
2½% on the next $20,000
1½% on the next $28,000
2% on all above the first $50,000

Thus, on a trust fund of $100,000 which yields an annual income of $5,000, the commissions would be:

On Principal

On the first	$ 2,000 @	5%	$100
On the next	20,000 @	2½%	500
On the next	28,000 @	1½%	420
On the remaining	50,000 @	2%	1,000
Total estate	$100,000		
Total commission on principal			$2,020

On Income

On the first	$2,000 @	5%	$100
On the next	3,000 @	2½%	75
Annual commission on income			$175

Commissions on income are payable annually. **Commissions on principal** are payable when the trust terminates.

The **commissions on voluntary trusts** are usually fixed by the trust agreement. Generally they are about the same as those allowed by law to testamentary trustees. In voluntary trusts, it is customary to pay half of the commission on principal at the beginning of the trust and the other half at the end.

THE TRUST COMPANY OR BANK AS TRUSTEE.—In the very essence of things, the ideal trustee is a trust company or a bank authorized to do a trust business.

Perpetual Existence.—In every way, the modern trust company or bank is better equipped than the individual to handle trusts. For one thing it offers **continuous administration,** which the individual cannot do. Human life is appallingly uncertain and illness a universal heritage. No man can always be at home or in his office, and beneficiaries of trusts often have suffered as the result of delays and annoyances due to the misfortune or preoccupation of individual trustees. A corporation, on the other hand, operating under a perpetual charter, has continuous life and a permanent abiding place, and its multi-personal organization is assurance against interruption of the duties of trusteeship caused by absence, disability or death. If an individual trustee dies or resigns before the termination of the trust, a successor or substitute must be appointed. This frequently requires legal proceedings, always more or less complicated and costly. It also involves the preparation of an accounting by the former trustee or his estate. And the expenses of the accounting, as well as the legal expenses, are a charge against the principal of the trust fund. Not only do these expenses reduce the amount ultimately to be turned over to the remainderman, but the beneficiary also suffers a loss of income by the reduction of the fund, in addition to the delay and inconvenience caused by the substitution proceeding.

Financial Responsibility.—Financial strength is another quality possessed by a trust company or bank in a degree equalled by few individuals. Institutions of this kind have large resources. Their capital must be kept in high grade investments of a character prescribed by law. Their operations are constantly under supervision of the banking authorities. From this standpoint alone, they are ideal fiduciaries—guardians, executors, administrators, trustees, custodians.

Expert Service.—Few individuals are equipped to perform the varied duties and tasks which fall to the lot of a trustee. Trust companies, and banks, on the other hand, have organizations of experts trained by long experience in the handling of trusts. Knowledge of banking practice and security values, facility in solving the many problems incident to trusteeship, machinery which insures accuracy in accounting and promptness in performance—these are qualities of trust company and bank service which the public has appreciated and is rewarding by increasing patronage. Following are some of the duties which prove troublesome to an individual trustee, but which are performed by a trust company or bank as a matter of everyday routine.

Accounting.—The trust company or bank keeps accurate accounts of all its transactions affecting either principal or income.

Amortization.—It keeps the principal of the trust fund safely invested and in making payments carefully differentiates between principal and income. If, for example, bonds have been purchased at a premium above par, the entire coupon is not to be treated as income. On the contrary, a part of each coupon

is principal and should be set aside to amortize, or gradually wipe out, the premium paid within the term of the investment, unless the trust provisions expressly relieve the trustee from this obligation.

Records of Recurring Duties.—Due dates of interest, dividends and rents, and dates on which to remit income are carefully noted and rigidly observed.

Accounts for Beneficiaries.—Accounts and statements are made to beneficiaries at regular intervals, and proper vouchers are obtained for all payments.

Guardianship

APPOINTMENT OF GUARDIANS.—Parents are the natural guardians of their own children. Children under the age of 21 are known in law as **infants or minors.** In case of the death of the parents, the protection of infant children and of their property is assumed by the state through its courts. A surviving parent may appoint a guardian for infant children by will or deed, if the law of the state permits. The court will appoint a guardian of the person to control the custody of a child, and a guardian of the property to care for his estate, on proper application. A guardian appointed by will is called a **testamentary guardian.** A guardian of the person or property is called a **general guardian.** A person appointed to represent an infant in a legal proceeding is called a **special guardian** or a **guardian ad litem.** A general guardian is required to safely keep the property of his ward which comes into his hands, investing moneys in the class of securities prescribed by law, and caring properly for real estate, and to deliver it to his ward when he comes of full age.

APPLICATION OF AN INFANT'S PROPERTY.—A general guardian of an infant's property is often appointed to receive a legacy or other fund to which his ward is entitled. The income from an infant's property may be applied to his support and education when necessary, but if the infant is living with his parents and they are able to support and educate him without resort to the income from his separate estate, the guardian must accumulate the income during the minority of his ward. The safest course for the guardian to follow is to make application to the court by which he was appointed for authority before making any payments. The court may also direct the application of principal toward the support and education of an infant when the income is inadequate.

COMPENSATION AND ACCOUNTING OF A GUARDIAN.—The compensation of a general guardian is usually fixed by law. It is generally the same as that allowed to executors and testamentary trustees. The courts exercise a supervision and control over guardians whom they appoint, usually by requiring the filing of a **surety bond** for the faithful performance of their duties, and the rendering of **annual accounts** so long as the guardianship continues. When the infant attains the age of 21 years and thereby acquires all his civil rights, it is the duty of the guardian to render to the court an account of his proceedings, in substantially the same form as that required of an executor or administrator. He must produce vouchers for his expenditures and the ward must be given an opportunity to examine the account for himself. Upon the approval of this account by the court, the guardian will be judicially discharged from further responsibility.

COMMITTEE, CONSERVATOR OR GUARDIAN OF INCOMPETENT PERSONS.—Insane persons, idiots and habitual drunkards are termed in law incompetent persons and are considered to be wards of the state. The courts, on proper application, will appoint guardians of their persons and

property whose responsibilities and duties are similar to those of a general guardian of an infant. These guardians are called guardians, committees or conservators, according to the usage of the state in which they are appointed

Corporate Trusteeship

TRUSTEES UNDER CORPORATE MORTGAGES.—Corporations are creatures of the statute law and their powers are defined and limited by the law. Corporations are in general of three kinds, public, quasi-public and private. **Public corporations** are such as counties, towns and cities. **Quasi-public corporations** are operated with private capital and for profit, but for purposes in which the public has a direct interest, such as railroads and electric light, gas and water companies. **Private corporations** are such as are created for the private benefit of the collective members of the corporation to promote their financial, social or religious interests. Quasi-public corporations are subject to regulation by the state and federal governments, and can not issue stock or bonds without the approval of the local public service commission and also in the case of railroads operating in more than one state, of the federal Interstate Commerce Commission. Banks and trust companies, mortgage companies and building and loan associations, although properly classed as private corporations, are also subject to the supervision of governmental departments, because the public has such a direct and vital interest in their safe operation and solvency.

A business corporation usually has capital stock sufficient to cover its investment in plant and provide working capital for the manufacture or purchase of its stock in trade. If, as in many lines of business, it is necessary to carry a larger inventory at certain seasons of the year than the working capital will permit, a successful corporation will have no difficulty in meeting these seasonal needs by borrowing directly from banks or selling its notes in the commercial paper market. Very often, however, a corporation finds it necessary or expedient for the extension of its plant or other purposes to borrow more money than can be obtained on current loans, and believing that the sum needed can be repaid out of surplus profits over a period of years it does not desire to issue additional capital stock therefor. Under these circumstances a mortgage on the property and franchises of the corporation is the approved method of financing.

A **corporation mortgage** is exactly the same in principle as the mortgage given by one individual to another to secure a loan on the pledge of his real property. The individual mortgagor usually also gives **a bond** to repay the loan to the individual mortgagee, and the bond and mortgage may be transferred from one person to another by assignment in writing. The mortgage and any assignments are recorded in the **land records of the county** in which the real estate is situated, and when the loan is repaid a discharge or satisfaction of the mortgage is recorded in the same office.

When a corporation borrows on mortgage the amount is usually so large that no single individual is able or willing to lend it all. The bond is, therefore, divided for convenience into many small units, usually of $100, $500 or $1,000 each, and distributed, generally through the medium of private bankers or investment companies, among many investors. A single mortgage to secure all these bonds is made to a trustee or trustees. This mortgage contains **covenants and conditions** designed to protect the bondholders and define the duties and responsibilities of both the mortgagor corporation and the trustees. It is executed in two or more duplicate originals by the mortgagor corporation, and

also by the trustee or trustees to signify their acceptance of the trust. For this reason it is often called an "indenture" of mortgage; because formerly, before the practice of recording deeds was established, when a deed was executed in counterparts it was written with both parts on one sheet, which was then cut or torn apart in a notched or indented line, each party retaining one part and the indentations serving as a safeguard against substitution or forgery. A corporate mortgage is also called a deed of trust, because it is made to a trustee.

FORM AND TERMS OF CORPORATE MORTGAGE.—Corporate mortgages vary greatly in their terms, according to the character of the business of the particular corporation and the property pledged, and the ideas of the lawyers who draw the instrument. No general form can be laid down, but the following features are common to most mortgages:

1. A recital of the date of the mortgage and the names of the parties.
2. A series of clauses, each beginning with the word "whereas," reciting such matters as the draftsman of the mortgage deems essential or desirable by way of explanation or representation, to show that the mortgage and the bonds which it is given to secure have been properly executed; as for example:
   (a) That the making of the mortgage has been duly authorized by vote of the stockholders and directors, and, if necessary, by the public service or other supervisory commission.
   (b) That the board of directors has duly authorized the issuance of bonds and interest coupons in the form which is set forth in full in the mortgage.
3. A "granting clause," transferring to the trustee the mortgaged property.
4. A particular description of the property to be mortgaged, which may consist entirely of real estate or entirely of personal property or of both real and personal property.
5. A "habendum clause," beginning "to have and to hold," describing the character of the estate granted by the mortgage.
6. A declaration of trust, setting forth the precise terms on which the trustee is to hold the property for the bondholders.

The **declaration of trust** is usually divided into a number of clauses, each dealing with a particular situation. It includes the covenants of the corporation, such as to keep the mortgaged property insured, to pay taxes, and properly to maintain the value of the security; a statement of the duties and remedies of the trustee in case of default by the corporation; provision for the redemption of bonds, if that is one of the features of the mortgage; provision for the release of portions of the mortgaged property in case of sale; for the issue of additional bonds upon the acquisition of additional property or for new construction; for the registration and exchange of bonds; and any other provisions which may be appropriate to the mortgage. The trustee is usually not required to take any action in case of default by the mortgagor unless requested to do so by the holders of a certain proportion of the outstanding bonds, generally from 10% to 25%.

There are various kinds of corporate mortgages, designated according to their character and security. For example, a railroad having first mortgage bonds outstanding may subsequently build or acquire other lines, and put out an issue of **"first and refunding mortgage" bonds,** which are a first lien on the new lines and a second lien on the old property, with a provision for the refunding or exchange of the first mortgage bonds for those of the new first and refunding issue. When all the first mortgage bonds have been thus refunded the new

mortgage becomes an absolute first mortgage on all the property. When the property pledged under a mortgage consists wholly or in part of the stock or bonds of another corporation owned by the mortgagor company the mortgage may be called a **collateral trust mortgage** or **a real estate and collateral trust mortgage.**

EQUIPMENT TRUST NOTES.—The equipment trust note is a modern form of corporate obligation **issued generally by railroad companies or tank car companies** on the security of railroad cars or locomotives. The indenture under which the notes are issued has many of the features of a corporate mortgage, but usually is not a mortgage in form but an **agreement of conditional sale and indenture of lease.** Under such an agreement, title to the equipment which is to be the basis of the notes is transferred to the trustee by vendors who have acquired or have contracted to acquire the railroad equipment from the manufacturers for the corporation which is to issue the notes, and the equipment is then leased by the trustee to the corporation issuing the equipment trust notes. Equipment trust notes are usually issued in bearer form like ordinary corporation mortgage bonds and are made **payable serially,** that is, a certain amount fall due at intervals of six months or a year, so that the last note will be paid off before the equipment is likely to be worn out.

FORM OF CORPORATE BONDS OR NOTES.—The bonds issued under corporate mortgages may be made with interest coupons attached, both bond and coupons being payable to bearer, or in registered form, like certificates of stock, payable only to the registered owner, to whom interest is paid by check mailed as it becomes due. The bonds are engraved or printed and are impressed with the corporate seal and signed by the proper officers of the corporation. Each bond also bears a certificate signed by the trustee that it is one of the series of bonds referred to in the mortgage therein mentioned. The attached interest coupons bear the engraved signature of the treasurer or secretary of the corporation. While no two bonds are exactly alike, the one shown on the accompanying page is a good example of the general form of a corporation mortgage bond.

To adapt this bond form to individual requirements, the following or other insertions may be made:

In case only part of the property is to be mortgaged in place of descriptive clause, insert: "The certain real estate and personal property of said The Commerce & Railway Co. mentioned or described, etc."

If a sinking fund is desired, insert: "This bond is entitled to the benefits of a Sinking Fund to be maintained by The Commerce & Railway Co. and used as provided in the said mortgage."

If right of redemption before due date is desired, insert: "This bond is redeemable at the option of The Commerce & Railway Co., its successors or assigns, on any day on which interest is payable hereunder on and after January 1st, 1925, at 105% of its par and accrued interest, on the conditions and in the manner provided in said mortgage."

The words "or hereafter acquired by it" appearing in the third paragraph of the foregoing bond form may be omitted.

REORGANIZATIONS.—In case a corporation fails to pay the interest or principal of its bonds when due, the trustee may bring an action in the courts for the **foreclosure of the mortgage,** in accordance with the provisions of the mortgage. It is not required to do so except when requested by the bondholders and satisfactorily indemnified for its expenses. The usual procedure upon default is for some of the bondholders to organize a **protective committee.** The

Number 000 | UNITED STATES OF AMERICA STATE OF NEW YORK | Number 000

$1000 $1000

THE COMMERCE & RAILWAY COMPANY

FIRST MORTGAGE 5% GOLD BOND

FOR VALUE RECEIVED, The Commerce & Railway Company, promises to pay to the bearer, or, if this bond be registered, to the registered holder hereof, on the 1st day of January, 1930, the sum of ONE THOUSAND DOLLARS, and to pay interest thereon from the 1st day of January, 1910, at the rate of five per centum per annum, payable semi-annually on the 1st day of January and July in each year until said principal sum shall be fully paid, upon presentation and surrender of the interest coupons hereto annexed as the same become due respectively.

Both principal and interest of this bond are payable in gold coin of the United States of America, of, or equal to the present standard weight and fineness, at the office of the Columbia Trust Company in the City of New York, free of tax in the United States.

This bond is one of a series of 500 bonds of said The Commerce & Railway Company of like amount, tenor and date, amounting in the aggregate to the sum of $500,000. numbered consecutively from 1 to 500, both inclusive, all of which bonds are equally secured by a first mortgage or deed of trust bearing date the 1st day of January, 1910, made and executed by said The Commerce & Railway Company to the Columbia Trust Company, as Trustee, of and upon all the real and personal property of said The Commerce & Railway Company now owned or hereafter acquired by it as mentioned or described in said mortgage, subject to the terms and conditions of which mortgage this bond is issued and held.

This bond may be registered in the manner and with the effect provided in said mortgage.

This bond shall not be valid or obligatory until the certificate endorsed hereon shall be signed by the Trustee under said mortgage.

IN WITNESS WHEREOF, said The Commerce & Railway Company has caused this bond to be signed in its corporate name by its President and its corporate seal to be hereto affixed and attested by its Secretary, and the interest coupons hereto attached to bear thereon the fac-simile of the signature of its Treasurer, as of the 1st day of January, 1910.

Attest: THE COMMERCE & RAILWAY COMPANY,

_____ By_____

Secretary *President.*

(FORM OF COUPON)

$25.00

The Commerce & Railway Company will pay to bearer at the office of the Columbia Trust Company in the City of New York, Twenty-five Dollars, United States Gold Coin, on the first day of _____ 19 ... being six months' interest then due on its First Mortgage bond No._____ dated January 1st, 1910.

_____

Treasurer.

(COUPON NUMBER)

TRUSTEE'S CERTIFICATE.

The within bond is one of the series of bonds referred to in the mortgage or deed of trust therein mentioned.

COLUMBIA TRUST COMPANY, Trustee.

By_____

Trust Officer.

Form of Corporate Bond

committee appoints counsel and selects a trust company or bank, or sometimes a private banking house, to act as its depositary. The committee then by advertisement in the newspapers and circularization of the bondholders who are known to it invites deposits of the bonds with the depositary, which issues **negotiable receipts** therefor. After a careful study of the situation the committee prepares a **plan of reorganization** and submits it to the bondholders. Any depositing bondholder who is not satisfied with the plan may withdraw his bonds within a certain time on payment of his pro rata share of the expense incurred by the committee.

The plan of reorganization often involves the **formation of a new corporation** to take over the property and business of the defaulting company by purchase at foreclosure sale, and the issuance of new securities in exchange for the defaulted bonds. Since the new securities will all go to the depositing bondholders, and those who do not deposit their bonds with the committee can get only their proportionate share of the cash realized in the foreclosure, which is usually a small sum, it is generally advantageous for all the bondholders to join in such a reorganization.

Corporate Agency

TRANSFER AGENT.—Trust companies and banks are commonly used as agents for corporations in connection with the **issuance of capital stock.** They act as transfer agents and registrars. It is the duty of a transfer agent to keep the stock certificate books and stock ledgers, to issue the original certificates, and when certificates are presented for transfer to cancel the surrendered certificates and issue new ones in the names of the transferees. It is customary for the corporation to furnish the transfer agent with stock certificates signed in blank by the proper officers and sealed with the corporate seal, so that the issue of new certificates need not be delayed by the necessity of getting them separately executed each time. The certificates are not valid until they have been countersigned by the transfer agent, so that there is no danger of overissue in thus signing in blank.

When a certificate of stock is presented for transfer the owner must sign **the assignment, or power of attorney** to transfer it, which is printed on the back of the certificate, or a detached power of like form which may be attached to the certificate. The signature to this power must correspond in every particular with the name as written on the face of the certificate. It should be witnessed or guaranteed in accordance with the rules of the transfer agent, which are usually those of the stock exchange of the city in which the agent is located, and are designed to give assurance of the genuineness of the signature. If the certificate is in the name of a deceased person or of an executor, trustee, guardian or other fiduciary, it must be accompanied by documents showing the authority of the fiduciary to make the transfer. In the case of stock standing in the name of a deceased person, this would include the waiver or consent of the taxing authorities of the states which are entitled to collect inheritance taxes on the decedent's estate.

The assignment or power of attorney to transfer contains a blank line for the insertion of the name and address of the person to whom the stock is to be transferred. If this is not filled in, the certificate is said to be **endorsed in blank,** or to be in bearer form, and its ownership may pass from one person to another by delivery until a name is inserted in the blank.

It is also the duty of the transfer agent to prepare and furnish to the corporation from time to time **lists of the stockholders** for use in voting at meetings and in the payment of dividends. The preparation of these lists is facilitated

by the modern method of keeping the names and addresses of stockholders on addressograph stencils arranged in alphabetical order ready for duplication at any time. Some corporations transfer their stock in their own offices, appointing an employee to act as transfer agent, but if the stock is listed on a stock exchange, it must also be registered and countersigned by a trust company or bank. This requirement is a safeguard against erroneous or fraudulent overissue.

When a stock is actively dealt in in more than one city, a transfer office is usually maintained in each city. Each transfer agent reports daily to the other the transfers it has made, furnishing copies of transfer sheets from which postings are made to the stock ledgers. If a certificate of stock is lost or destroyed it is customary to issue a new one to the stockholder upon his filing a bond of a satisfactory surety company in an amount acceptable to the transfer agent—usually double the market value of the stock—indemnifying the corporation as well as the transfer agent and the registrar.

REGISTRAR.—The danger of an overissue of stock through carelessness or fraud and the possibility of the forgery of stock certificates has brought about the almost universal custom of having stock certificates registered by a trust company or bank. Most of the stock exchanges require that listed stocks shall be registered, and make it a rule that a trust company or other agency shall not at the same time act as both transfer agent and registrar for the same corporation. When a registrar is appointed, it is furnished with a list of the stockholders, showing the number of shares held by each. As new certificates are presented for registration old ones for the same number of shares must be presented canceled to be marked off of the registrar's list. Thus no more than the total number of authorized outstanding shares can be registered. The duties of the registrar do not require it to pass upon the sufficiency of the transfer, which is a responsibility of the transfer agent. When stock is actively dealt in in more than one city, a registry office is usually maintained in each city, and each registrar reports daily to the other the registrations it has made.

DIVIDEND DISBURSING AGENT.—The transfer agent of a corporation's stock is often appointed also as its dividend disbursing agent because of the convenience and economy of this arrangement. In all large companies dividends are paid at regular periods, usually quarterly or semiannually, by checks to the order of the registered stockholders mailed to their addresses or pursuant to their recorded instructions. The checks are written up by machine from the addressograph stencils maintained by the registrar, and the amounts are filled in with a check writing machine. Envelopes are addressed by the use of the same stencils, or a still further economy of time and labor is secured by using "window" envelopes which have an open or transparent space that fits over the name and address as printed on the checks. An agent which disburses dividends for many companies can perform this service usually at a much smaller expense than the corporations acting separately would have to incur. The procedure is for the corporation to notify its dividend disbursing agent of the declaration of the dividend and deposit with it the amount to be paid out, with instructions to prepare and mail checks to stockholders of record as of the date on which the dividend is declared payable. The checks are imprinted with the name of the corporation but are signed by the disbursing agent.

COUPON-PAYING AGENT.—Interest on bearer bonds of corporations is represented by coupons which must be detached by the bondholder and presented for payment to the corporation or its fiscal agent. As a convenience to bondholders a trust company or bank is usually designated as paying agent.

The bondholder encloses the coupons in an envelope which his bank will provide and deposits them for collection like a check. In certain cases they must be accompanied by **income tax ownership certificates.** When the coupon paying agent has paid the coupons, they are canceled and returned to the corporation. They may then either be pasted in coupon books for preservation until the maturity of the mortgage, or destroyed by representatives of the company and of the trustee of the bond issue, acting jointly, after notation of their payment has been made on the books of the trustee. This last point is important, because when the mortgage falls due and the bonds are paid or refunded the trustee will require the production of all paid coupons or evidence of their payment and destruction before it will satisfy the mortgage of record, as the mortgage is given to secure both the principal and the interest of the bonds.

FISCAL AGENT.—Another function of the coupon-paying agent usually is to withhold any income taxes which the corporation is required to withhold or pay, and to file with the U. S. Internal Revenue Department the monthly and annual reports of coupons paid and taxes collected which the law requires of corporations. This, however, necessitates the formal designation of the coupon-paying agent by the board of directors of the corporation as its fiscal agent, with authority to withhold any required income tax and pay it over to the government and to make and file the statutory reports.

ESCROW AGENT.—Trust companies and banks are often made agents or depositaries under escrow agreements. The word "escrow" means scroll or writing. It has come to have a technical legal meaning, and is used to describe an agreement under which a deed or other thing of value is deposited with a third person for delivery to another, usually the grantee, on some condition. For example, A sells some stock to B, to be paid for in instalments and delivered upon the final payment. A endorses the stock in blank and delivers it to a trust company or bank with a letter in which both he and B join, directing it to hold the stock until B has paid to it for account of A the amount agreed upon, within a certain time, or if the full payment shall not be made, to return the stock to A, or make such other disposition of it and of any partial payments as A and B may agree upon by the letter and direct.

CUSTODIAN OF SECURITIES.—Trust companies and banks are admirably adapted to act as custodian of securities for religious, charitable or educational institutions, whose treasurers are usually honorary officers serving without compensation and who do not wish to maintain in their own offices expert financial assistance. Many such organizations have by action of their boards of directors appointed a responsible bank or trust company as custodian or assistant treasurer, and turned over to it all the investments of the organization for safekeeping and to be dealt with as the board or its authorized officers or committees may from time to time direct.

Voting Trusts

VOTING TRUSTS.—The voting trust is a device in corporate management which consists in the transfer of at least a majority of the stock of a corporation to trustees, usually three or five in number, to be voted as the trustees deem best for a period of years, in order to perpetuate a management or policy which is believed to be for the best interest of the corporation. An **agreement** is drawn up by the terms of which any other stockholders may also deposit their stock thereunder. The duration of a voting trust is often limited by law. In

New York this limit is ten years. The holders of the stock transferred receive **voting trust certificates** instead of their stock certificates. The voting trust certificates are traded in and transferred in exactly the same manner as stock certificates. The **voting trustees** must provide some agency to receive the stock and issue the voting trust certificates in their behalf, and it is customary to appoint a trust company or bank to act as such agent and depositary.

The following is a typical voting trust certificate:

BLANK PETROLEUM CORPORATION

No..... .....Shares

INCORPORATED UNDER THE LAWS OF THE STATE OF WEST VIRGINIA

COMMON STOCK TRUST CERTIFICATE

THIS IS TO CERTIFY that as hereinafter provided, on surrender hereof and upon payment, if the Voting Trustees shall so require, of a sum sufficient to reimburse them for any stamp tax or other governmental charge in connection with such delivery,..... .....will be entitled to receive a certificate or certificates expressed to be fully paid for.....shares of the par value of $100 each, in the Common Capital Stock of the Blank Petroleum Corporation; and, in the meantime, to receive payments equal to the dividends, if any, collected by the undersigned Depositary upon a like number of such shares standing in its name as agent of the Voting Trustees, such dividends, if received by the Depositary in stock of said Corporation, to be payable in trust certificates.

This certificate is issued pursuant to, and is subject to the terms and conditions of, a certain Agreement lodged with the Depositary, dated October, 1912, between owners of common stock in Blank Petroleum Corporation and the undersigned Voting Trustees and Depositary. No stock certificate shall be due or deliverable hereunder before October 1, 1917, unless the Voting Trustees, in their unrestricted discretion, shall determine to authorize such delivery prior to said date as in said Agreement provided. Until the actual transfer of such stock certificates to the registered owner hereof, the Voting Trustees, singly or collectively as in said Agreement provided, shall possess and be entitled in their discretion to exercise, in respect of any and all such stock, through the Depositary, all rights of every name and nature including the right to vote thereon for every purpose and to consent to any corporate act of said corporation as provided in said Agreement, it being expressly stipulated that no voting right passes by or under this certificate, or by or under any agreement express or implied.

This certificate is transferable at the office of the Depositary for the time being under said Agreement, on surrender hereof by the registered holder in person or by attorney duly authorized, in accordance with the rules from time to time established by the Voting Trustees, and, until so transferred, the Voting Trustees and the Depositary may treat the registered holder as the owner of this certificate for all purposes whatsoever.

This certificate is not valid unless signed on behalf of the Voting Trustees by the Depositary for the time being under said Agreement as their agent, and also registered by the Registrar for the time being under said Agreement.

IN WITNESS WHEREOF, the said Voting Trustees have caused this certificate to be signed on their behalf by the Depositary, their duly authorized agent for that purpose, this..... day of....., 19....

.....
.....} Voting Trustees
.....

By their agent,
BLANK TRUST COMPANY,
Depositary

By.....

Registered this ....., 19....

BLANK MORTGAGE AND TRUST COMPANY,
Registrar

By.....

Receivers

RECEIVER.—When a corporation becomes insolvent, the directors, bondholders or general creditors may petition the court to appoint a receiver of the assets of the corporation. A receiver may also be appointed on the petition of a stockholder, if the directors are wasting or misapplying the property or funds of the corporation. The receiver is the **representative of the court,** and as such supersedes the board of directors in the management of the corporation. It is his duty to take full charge of the business and carry it on under the direction of the court until it is reorganized or liquidated. He is required to give a bond for the faithful performance of his duties and his compensation is fixed by the court and payable out of the earnings or assets of the corporation.

SECTION 32

FEDERAL TAXES

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SECTION 32

FEDERAL TAXES

SCOPE AND TREATMENT.—In this section will be found an outline of practice and procedure relating to the following taxes: the federal income tax, the federal estate tax, the federal capital stock tax, and miscellaneous federal taxes. While the principles enumerated regarding the various federal taxes will apply under any revenue act, modifications in certain respects will become necessary as new laws go into effect. Reference should therefore be made in all cases to the current revenue act to ascertain changes since the publication of this Handbook. This is particularly true as to rates of tax and computations. The statements contained herein are based on the 1924 Revenue Act. Limitation of space and the general principles governing the compilation of handbooks prevent discussion of details or of controversial points. This section can act only as a general guide and not as an exhaustive reference book. Readers who require a full and complete treatment of the subject should refer to the current edition of **Montgomery's Income Tax Procedure.** It will also be useful to have the **Internal Revenue Bulletins** and the **Reports of the United States Board of Tax Appeals** (both issued by the Government Printing Office, Washington, D. C.). **Loose-leaf services** covering federal taxes are published by Corporation Trust Co. and by Prentice-Hall, Inc., both of New York.

FEDERAL INCOME TAX

General Survey of Federal Income Tax Laws

The taxation of income by the Federal Government can be said to have commenced with the **ratification of the Sixteenth Amendment to the Constitution** by the necessary number of states on February 25, 1913. An income tax was imposed during the Civil War but was repealed thereafter. Another law was passed in 1894 but was held to be unconstitutional. Because of this decision an amendment to the Constitution was necessary before Congress could impose an income tax without apportionment among the states. **March 1, 1913,** is usually referred to as the **basic date** since which Congress had the power to tax income without apportionment.

CORPORATION EXCISE TAX LAW OF 1909.—The 1909 excise tax law imposed a **1% tax on the net income of corporations.** Although the law was based on cash receipts and disbursements, the Treasury interpreted it so that net income could be determined on the accrual basis. A credit of $5,000 was allowed. Interest deductible was limited to that paid on an amount of indebtedness not exceeding the paid up capital stock. This law continued in **effect until February 28, 1913.** No deduction was permitted for depletion.

1913 LAW.—This law was the first of the modern federal income tax laws in this country. On **corporate incomes** the rate of tax was 1%, no specific exemption being allowed. For **individuals** a normal tax of 1% was applied, together with a **surtax** beginning at 1% on net incomes over $20,000 up to 6% on incomes over $500,000. The personal exemptions were $3,000 for single persons and $4,000 for a married couple. Losses were deductible by individuals only when incurred in trade or when arising from casualties. **Depletion** was restricted to 5% of the value of the output. **Interest** was deductible only on indebtedness not in excess of one-half of the sum of paid-up capital stock and interest-bearing indebtedness. **Dividends received by corporations** were taxable even if derived from wholly owned subsidiaries. Corporations were allowed to use a fiscal year basis of reporting if notice of intention to do so was filed within a specified period. This law was **effective until December 31, 1915.**

1916 LAW.—This law was the earliest of the war measures. The rate of tax was raised to 2% for **corporations** (no exemption), while **individuals** were subjected to a normal tax of 2% as well as to surtaxes on incomes over $20,000, ranging from 1 to 13%. The personal exemption for the purpose of the normal tax was $3,000 for single persons and $4,000 for husband and wife. The basic date for computing profit on sales of property and depreciation was fixed at March 1, 1913. The deduction for losses was liberalized to some extent and the earlier limitation on depletion eliminated. Provisions in the law taxing stock dividends and life insurance proceeds received by corporate beneficiaries were subsequently held invalid. This law continued **in effect until December 31, 1917.**

1917 LAW.—In order to raise additional revenue after our entry into the World War, the 1917 law was passed as an amendment to the 1916 law. During the year 1917 there were, therefore, **two laws in effect,** with consequent complications. An **additional normal tax** of 2% was imposed on individuals (except on incomes between $1,000 and $2,000 on which the tax was only 2%) and an additional tax of 4% was imposed on corporations. **Surtaxes** were imposed (in addition to those under the 1916 law) on individual incomes over $5,000 ranging from 1 to 50%. For the purpose of the 1917 tax computations the personal exemption of husband and wife was reduced to $2,000, and that of single persons to $1,000; a credit of $200 was allowed for each dependent. In computing the 4% tax on corporations, dividends received were excluded. While deductions for **contributions to charities,** etc., were permitted up to 15% of the net income, the deduction of income and excess profits taxes was not allowed, nor was interest paid to purchase and carry tax exempt securities allowed as a deduction.

The 1917 law also imposed an **excess profits tax** on individuals, partnerships and corporations. Individuals deriving their income from personal services were subject to a tax of 8% with an exemption of $6,000. Domestic partnerships or corporations without invested capital, or with only a nominal capital, were also subject to the 8% tax, the exemption being $6,000 for partnerships and $3,000 for corporations. Other corporations and partnerships were subject to excess profits taxes ranging from 20 to 60% of net income, dependent on the amount of invested capital and pre-war earnings. This law was **in effect for the calendar year 1917.**

1918 LAW.—Although not passed until February, 1919, this law was **effective retroactively to January 1, 1918.** As a law it was complete in itself and replaced the 1916 and 1917 laws which were operative concurrently throughout 1917. The need for increased revenue resulted in higher tax rates. The **normal tax**

rate for the year 1918 was 12% on individuals and corporations with a reduction to 6% on the first $4,000 of taxable income for individuals who were citizens or residents of this country. For the years 1919 and 1920 the normal tax for individuals was 8% (4% on the first $4,000 of taxable income for citizens or residents), while that for corporations was reduced to 10%. The **surtax rate** for individuals having incomes in excess of $5,000 ranged from 1 to 65%. On **corporations** (but not on partnerships) an excess and war profits tax with brackets of 30, 60 and 80% was imposed for 1918 and with brackets of 20 and 40% for 1919 and 1920, a credit, computed on invested capital, or in some cases on pre-war earnings, being allowed. A special class of personal service corporations was provided under the 1918 law which included corporations whose income was ascribed mainly to the activities of the principal stockholders and in which capital was not a material income-producing factor. Such corporations were treated in a way similar to partnerships for tax purposes.

Returns had to be made on the basis of the taxpayer's accounting period; individual deductions for losses were again liberalized; consolidated returns were required in the case of affiliated corporations; depreciation and depletion allowances were more liberal than theretofore; the arbitrary limitation on interest deductions by corporations was eliminated; dividends received by corporations were wholly exempted from normal tax; a deduction for amortization of war facilities was introduced; credits were allowed for income and profits taxes paid to foreign governments; and a specific credit of $2,000 was allowed to corporations for the purpose of the income tax; the personal exemptions remained the same as under the 1917 law.

Although the law provided otherwise, the Supreme Court of the United States decided that the profits on the sale of property acquired before March 1, 1913 was to be based on cost or March 1, 1913 value, whichever was higher, while deductible losses were to be determined on whichever basis was lower. If the selling price fell between cost and March 1, 1913 value, no taxable gain or deductible loss arose.

1921 LAW.—For most purposes the 1921 law, which was signed November 23, 1921, was effective from January 1, 1921. However, the excess profits tax was continued only for 1921, and at the same rates as were imposed by the 1918 law for 1919 and 1920. Effective January 1, 1922, the income tax on corporations was increased to 12½%, the excess profits tax being no longer in effect. At the same time the surtax scale affecting individuals was changed so as to make the maximum surtax 50%; surtaxes began at $6,000, instead of $5,000 as theretofore.

Another radical change effective January 1, 1922, was that the **profits from the sale or exchange of property held for profit or investment** (excluding stock in trade and property held for personal use) for two years or over, termed capital gains, were taxable at 12½% instead of being subject to the ordinary normal and surtaxes. Capital losses, however, were deductible at the highest surtax rates.

Other changes effective January 1, 1921, were: The personal exemption of husband and wife was raised to $2,500 if the net income did not exceed $5,000; the credit for dependents was raised to $400; the establishment of a "readily realizable market value" was made the criterion of taxability in exchanges of property; the reorganization provisions were liberalized; business losses could be carried forward and applied against income of the two succeeding years; the basis to be used in the case of sale of property acquired by gift was to be that which would have been used by the donor; the deduction of losses through

so-called "wash" sales was disallowed; additions to reserves for bad debts were permitted as deductions; interest was to be paid by the Treasury on taxes refunded to the taxpayers; returns were to be filed whenever an individual's gross income exceeded $5,000 independent of his or her net income; the limitation period for additional assessment was changed and a provision was inserted allowing binding agreements between taxpayers and the Commissioner to prevent reopening of tax returns. By amendments of March 4, 1923, the period for filing 1917 refund claims was extended, and certain classes of exchanges previously non-taxable were thereafter considered as closed transactions.

1924 LAW.—With the exception of a 25% reduction in tax payable for the year 1923, the 1924 law was effective from January 1, 1924 although not signed by the President until June 2, 1924. The **normal tax rate** for individuals was reduced to 6% (except that the first $4,000 of taxable income was taxed at 2% and the second $4,000 at 4%), but the **corporation tax rate** remained at 12½%. The **surtax rates** on individual incomes began at 1% on net incomes over $10,000 and rose to 40% on incomes over $500,000. A slight change was made in the personal exemptions so that no reduction from $2,500 to $2,000 was required when incomes exceeded $5,000. Income arising from personal services up to a maximum of $10,000 was taxed 25% less than income arising from other sources.

The general basis for computing the profit or loss on the sale of property acquired before March 1, 1913, was changed so that the taxable gain or deductible loss was predicated on cost or March 1, 1913 value, whichever was higher. Extensive changes were also made in regard to the closed transaction; gain or loss was to be recognized in all cases other than those expressly excepted. The reorganization sections were liberalized in some respects but the benefit gained by reorganizations under the 1918 and 1921 laws which resulted in higher bases for depreciation, depletion, etc., was nullified.

The definition of capital assets was modified so as to include property held for personal use. Capital gains were still taxed at 12½% but capital losses could not reduce the tax liability by more than 12½%. Estates and trusts were considered as subject to tax in all cases, deductions, however, being allowed for income which was properly distributed or distributable. The income of revocable and insurance trusts was taxed to the grantor.

A quasi-judicial tribunal, the **United States Board of Tax Appeals,** was set up under the 1924 law to which taxpayers might appeal against additional assessments proposed by the Treasury before the payment of the tax was actually made. As a result of this provision much of the hardship which arose from erroneous assessments under earlier laws was removed.

Changes were also made in the statutory period during which assessments could be made, also during which claims for refund could be filed by taxpayers. If, for 1917, a waiver, permitting the assessment of tax after the expiration of the statutory period was filed within 5 years of the due date of the return for that year, or if a waiver for 1918 was filed on or before June 15, 1924, claims for refund or credit could be filed on or before April 1, 1925. By amendments of March 3, 1925, the filing of waivers for 1919 before June 15, 1925, extended the time in which claims for refund or credit could be filed until April 1, 1926. It was also provided in all of the above cases that the filing of a further waiver before the expiration of the original waiver would extend the period for filing claims for refund and credit to April 1, 1926, for the years 1917 and 1918, and to April 1, 1927, for the year 1919.

Definitions

The following definitions apply specifically to the federal income tax law.

PERSON.—Under the law, the term "person" means an individual, an estate or trust, a partnership or a corporation. Any person subject to tax is considered as a taxpayer.

INDIVIDUALS.—Within the category of individuals come citizens of the United States, resident or non-resident, aliens and fiduciaries. Under certain conditions minors are recognized as individuals. A "head of a family" is an individual who actually supports in one household, one or more individuals closely connected with him or her by blood relationship, relationship by marriage or by adoption and who has the right to exercise family control over such dependents. A legal guardian is not *per se* the head of a family. A resident alien cannot qualify as head of a family unless his dependents live with him in this country.

ESTATES AND TRUSTS.—The classification **"fiduciary"** includes guardians trustees, executors, administrators, receivers, conservators, or any persons acting in a fiduciary capacity. A fiduciary differs from an agent in that a position of peculiar confidence is implied in the former capacity. The status of a trust or estate depends upon the laws of the country under which it arises, and has nothing to do with the citizenship of the fiduciary. Special rules are applicable to estates and trusts having non-resident alien beneficiaries. **Business trusts** of the "operating" type are taxed as associations, while **"holding trusts"** are usually treated as other trusteeships.

PARTNERSHIPS.—A domestic partnership is one organized or created in the United States, including only the states, the District of Columbia, Alaska or Hawaii. All others are foreign. **Joint adventures** are not usually considered to be partnerships unless the usual legal attributes of partnership exist. **Stock syndicates** are held to be joint adventures and not partnerships. **Limited partnerships,** which under state laws contain one or more general partners whose liability is unlimited, are treated as true partnerships; those which consist entirely of members whose liability is limited are treated as corporations for tax purposes.

CORPORATIONS.—Under the law the term "corporation" includes associations, joint-stock companies and insurance companies. Organizations which act or do business in an organized capacity, however created, are treated as corporations if the earnings are distributed on the basis of shareholdings or capital invested. The transferability of membership interests without the consent of the other members and the conduct of business by others than members are indications of associations and differentiate them from partnerships.

Returns

Under the law the Commissioner of Internal Revenue may require any returns necessary and may prescribe all needful rules and regulations. Taxpayers must keep such records (including inventory records where such are necessary to determine income) as will enable the Treasury to verify the accuracy of returns made by taxpayers.

FORMS USED.—The forms in commonest use are designated as follows:

1040	Individual tax return, net income over $5,000, calendar year basis.
1040 FY	Similar but for fiscal years.

1040 A	Individual tax return, net income less than $5,000.
1040 B	Individual tax return, non-resident alien.
1120	Corporation tax return, calendar year.
1120 A	Similar but for fiscal years.
1120 T	Tentative corporation tax return.
1126	Inventory certificate.
1065	Partnership return, calendar year.
1065 A	Similar but for fiscal years.
1041	Fiduciary return.
843	Claim for abatement, refund or credit.
1000	Ownership certificate—tax paid at source.
1001	Ownership certificate—tax not paid at source.
1096	Summary form for use with 1099.
1097	Information return of dividends paid by corporations.
1099	Information return of salaries, interest, etc., paid.
1116	Claim for foreign tax credit—Individuals.
1118	Claim for foreign tax credit—Corporations.

These forms can be obtained from local collectors of internal revenue.

PERIOD COVERED.—Returns are usually made for a "taxable year" which cannot exceed 12 months. A **"taxable year"** means the calendar year or a fiscal year ended therein. A **fiscal year** is a period of 12 months ending on the last day of any month except December. Commencing with 1924 the term "taxable year" specifically included a fractional part of year for which a return might be required under certain circumstances.

All taxpayers may keep their accounts on a fiscal year basis, and if they so keep their books, their returns must be on the same basis. If no books are kept, the calendar year basis must be used in all cases. A newly organized business may select the basis upon which to keep its books. This decision will control the basis of its returns. No notice to the Commissioner is required in such cases as the first return will be sufficient indication.

If taxpayers desire to change from the calendar year basis to a fiscal year basis, or vice versa, or from one fiscal year to another, application must be made to the Commissioner on form 1128 at least 30 days before the end of the proposed period for which a return would be required to effect the change and the reasons for the desired permission stated. If the application is granted, the new basis must be used in subsequent returns. A return must be filed for the fractional period intervening between the end of the last taxable year and the beginning of the next taxable year.

TIME FOR FILING.—Returns on forms 1040, 1120, 1065 and 1041 (and their modifications) are required to be filed on or before the 15th day of the 3rd month following the end of the taxable year—March 15, if the calendar year basis is used. If the designated day falls on Sunday or on a legal holiday, the returns are due on the following day. A corporation which has been dissolved, may file its return immediately or wait until the end of its taxable year. The latter is usually more advantageous.

Extensions of time for filing returns can be granted only by the Commissioner upon application showing a reasonable cause filed before the prescribed due date. Usually the Commissioner requires the filing of a tentative return (merely showing estimated tax due) on the usual due date and the payment of one quarter of the tax shown thereon to be due. No extension may exceed 6 months, except for taxpayers who are abroad. Local collectors of internal revenue cannot grant extensions for any reason.

PLACE OF FILING.—Returns are filed with the collector of internal revenue for the district in which the taxpayer's legal residence or principal place of

business is situated. If a taxpayer has no legal residence or place of business in the United States, returns are sent to the Collector at Baltimore, Md. The various information returns are filed with the Commissioner of Internal Revenue, Washington, D. C.

If returns are not filed in person, they may be mailed, on condition that they are placed in the mails in sufficient time to reach the collector on or before the due date. Postage is required to be prepaid.

INDIVIDUAL RETURNS—WHO SHALL MAKE RETURNS.—Returns on form 1040 or its modifications are required from—

1. Individuals having a net income for the taxable year of $1,000 or over if single, or not living with husband or wife.
2. Individuals whose net income is $2,500 or over if married and living with husband or wife.
3. Individuals whose gross income is $5,000 or over, quite independent of the amount of net income or whether any tax is due.

The fact that an individual is the head of a family or has dependents does not affect his liability to render returns. If a husband and wife have a net income of $2,500 or over, or a gross income of $5,000 or over, the income of both may be included in a joint return, or they may make separate returns of their individual incomes. Personal exemptions, credit for dependents, dividends, etc., are not considered in ascertaining liability for filing tax returns.

If a taxpayer is unable to make his own return, such return may be made by a duly authorized agent or by a fiduciary.

All income tax returns must be verified by oath or affidavit before any officer authorized to administer oaths under federal or state laws. The acknowledgment should not be made before a notary who has any interest in the preparation or filing of the returns.

Separate Returns of Husband and Wife.—Although in many cases joint returns are filed, it may be advantageous in some cases to file separate returns. An election as to whether a joint return or separate returns are filed is only binding for the year in question and does not affect a taxpayer's action in subsequent years.

Separate returns are usually desirable when each spouse has a substantial income. Surtaxes are thereby reduced and the full advantage obtained of the lower normal tax brackets. The most advantageous division of the personal exemption should be used.

Joint returns should be filed where one spouse has a loss which may be offset against the other's income; where one spouse has charitable contributions in excess of 15% of net income while the other has not exceeded his 15% allowance; where the credit due one spouse for tax paid at source or foreign taxes exceed the tax liability of that spouse, and where the excess credit can be absorbed by the other spouse; and where full advantage of the exemption from normal tax on dividends, etc., cannot be obtained in separate returns, due to losses or other deductions.

From a practical viewpoint the best method of ascertaining whether joint or separate returns should be filed is to compute the tax on each basis with varied allocations of personal exemptions and then file returns on the basis which shows the least combined tax.

Minors.—Individuals under the statutory age of majority must file returns if they have a net income of $1,000 or over, if single, $2,500 or over if married or if their gross income exceeds $5,000. Unless a minor has been emancipated by his parent, his earnings from personal services must be included in the

parent's return, no return being required from the minor. Such compensation is not considered as income to the minor. If the minor's income is from property, such income is not included in the parent's return, but a separate return must be made by the minor (or someone acting for him as agent, guardian, or trustee) if the income exceeds the statutory exemptions.

Community Property.—Community income as defined by the laws of Texas, Washington, Arizona, Idaho, New Mexico, Louisiana and Nevada (but not California) may be equally divided between husband and wife in separate returns.

CORPORATION RETURNS.—All corporations, except those specifically exempted from tax, must file returns, regardless of the amount of their gross or net income. Such returns must be filed upon the same basis, fiscal or calendar year, as the corporation's books are kept. The returns must be sworn to by the president, vice-president or other principal officer, and by the treasurer or assistant treasurer. When only one officer is available, he will sign for the other in the latter's official capacity.

Inactive, dissolved and incomplete corporations raise questions sometimes difficult of solution. The general rule is that if a corporation has the right to continue to function as such under the laws of the state in which incorporated, whether or not it has received income, returns must be filed. The dissolution of a corporation before the passage of a new law applicable to any part of the period before dissolution, does not relieve the corporation from the necessity of filing returns under such subsequently enacted statute. **Holding companies** even though receiving no income other than dividends, must file returns unless specifically exempted from tax under the law.

When a **foreign corporation** has income from sources within the United States as defined in the statute, but has no office in this country, the requisite returns must be filed by its agent in this country. When **receivers, trustees in bankruptcy or assignees** are operating the property or business of corporations, they will make returns in the same manner and form as corporations are required to do. This is also true in the case of trustees in dissolution. A receiver in charge of only part of a corporation's property (e.g., in mortgage foreclosure proceedings) will not file a return for the corporation.

With their returns, corporations must submit such a statement as will enable the Commissioner to determine the portion of the earnings or profits accumulated during the taxable year which have been distributed or ordered to be distributed to its shareholders.

Affiliated Corporations.—Two or more domestic corporations are deemed affiliated under the law if one corporation owns at least 95% of the voting stock of the other or others, or if at least 95% of the voting stock of two or more corporations is owned by the same interests. Foreign corporations are excluded, as are those organized under the China Trade Act, 1922, and those whose income arises mainly in United States possessions. The phrase "same interests" means the same individual(s), partnership(s) or corporation(s). Where there is more than one owner, the percentage of ownership is required to be substantially the same in each corporation. The status of a corporation as regards affiliation is not changed by the fact of a receivership.

Consolidated returns may be filed by affiliated corporations at their option, but an election made for 1924 will be binding for subsequent years unless permission to change is obtained from the Commissioner. The advantages of consolidated returns are that intercompany transactions can be made without affecting taxable income and that losses of one or more corporations can be

offset with full effect against profits of others. However, only one specific credit of $2,000 is allowed to the affiliated group, independent of the number of corporations affiliated. The fiscal years of all affiliated corporations must be made to correspond with that of the principal company. Where a change in the affiliation status occurs during the taxable year, separate returns must be made for the non-affiliated corporations for the period during which they are not affiliated.

The consolidated return is filed with the collector of the district in which the principal reporting company has its principal office. Each of the other affiliated corporations files an information return, form 1122, with its respective collector. The tax will be assessed against the respective corporations in any way agreed upon among them. Under certain conditions the Commissioner may consolidate the accounts of any related trades or businesses (incorporated or unincorporated, and whether organized in this country or not) in order to make an accurate apportionment of gains, profits, income, deductions or capital between them. This provision does not relate to the payment of taxes but to the determination of income, etc.

PARTNERSHIP RETURNS.—Partnerships (except those which are classified as corporations for federal tax purposes) are **not taxed as entities,** but the members thereof are individually taxable on their distributive shares of the partnership income. However, every partnership is required to file a return on form 1065 or variant thereof, in which is given the data necessary for the determination of the shares of the individual members. This return must be sworn to by one of the partners. The partnership return contains the usual items of income and corresponding deductions, except that no deduction is allowed for contributions. Interest on U. S. obligations whenever issued is excluded. The net income so determined is then allocated to each partner in such a way as to show separately each individual's share of dividends, earned income, capital net gain or loss, income tax paid at the source, and income and profits taxes paid to foreign countries. A statement of the principal of non-taxable securities and interest thereon is also required.

If the fiscal year of the partnership falls partly within a calendar year to which the provisions of one law apply and partly within a year to which the provisions of a succeeding law apply, the income taxable for each period must be segregated. A special form (1065 A) is usually provided for such cases.

This return is filed with the collector for the district in which is located the principal office of the partnership not later than March 15, in the case of partnerships reporting on a calendar year basis, or not later than the 15th day of the third month following the close of the fiscal year in other cases. When changes occur in the membership of firms during the year, such changes are to be reported in the next return filed. Frequently there is no necessity for filing separate returns for the old and new partnerships, but it is sometimes convenient to do so. **Receivers for partnerships** file the ordinary partnership return.

FIDUCIARY RETURNS.—The fiduciary, or at least one of joint fiduciaries, **in charge of the income of an individual,** makes a return of income on behalf of that individual in the same way and under the same conditions as the individual would file such returns were his income not under the charge of the fiduciary. The fiduciary **in charge of an estate or trust** makes a return for such estate or trust if the net income thereof is $1,000 or over, or if the gross income is $5,000 or over, regardless of the amount of net income, or if any beneficiary is a non-resident alien. The appropriate returns are filed, at the time prescribed for the filing of individual tax returns, with the collector of

the district where the fiduciary resides. Form 1040 and/or 1041 are used for returns by fiduciaries. A consideration of the statutory definition of the net income of estates and trusts is necessary to determine which returns are required to be filed in any particular case.

Net Income of Estates.—The net income of estates is determined in the same manner as for individual taxpayers, with the following exceptions:

1. In lieu of the deduction for contributions allowed to individuals, which is limited in amount, estates and trusts may deduct any amount which is, in accordance with the will or deed of trust, paid or set aside for purposes enumerated in the deductible contributions section of the law (see Deductions for Contributions, page 1605) or is to be used exclusively for religious, charitable, scientific, literary or educational purposes, or for the prevention of cruelty to children or animals, etc.

2. As an additional deduction there is allowed the amount of income of the estate or trust distributed currently to beneficiaries and the amount of income collected by a guardian to be held or distributed under court order.

3. In the case of estates during the period of administration, there may be deducted the amount of income properly paid or credited during the taxable year to any legatee, heir or beneficiary.

The trustee under the following conditions will exclude certain income from the return, since under the law such income is to be taxed to the grantor:

1. Where the grantor of a trust has, at any time during the taxable year, either alone or in conjunction with any person not a beneficiary of the trust, the power to revest in himself title to any part of the corpus of the trust, then the income from such part of the trust shall be included in the return of the grantor.

2. Where any part of the income of a trust may, in the discretion of the grantor, either alone or in conjunction with any person not a beneficiary of the trust, be distributed to the grantor or be held or accumulated for future distribution to him, such part of the income of the trust shall be included in the return of the grantor.

3. Where any part of the income of a trust is or may be applied to the payment of premiums on insurance policies on the grantor's life (unless the proceeds of the policies are irrevocably payable to those organizations to which contributions are deductible by individuals), such part of the income of the trust shall be included in the return of the grantor.

Trusts created by employers as part of a stock bonus or profit-sharing scheme are not taxable as such. However, the participants are taxed on the excess of withdrawals over their personal contributions to the trust.

Use of Forms 1040 and 1041 by Fiduciaries.—If a **trust or estate** has a net income as defined by statute for trusts and estates and outlined in the foregoing paragraphs, form 1040 must be used and the tax shown thereon paid by the fiduciary. If the trust or estate has no net income as defined by statute, or if amounts have been distributed to beneficiaries, or if the income of the trust is by statute taxable to the grantor, form 1041 must be filed. Thus in some cases both 1040 and 1041 will be required.

Description of Form 1041.—This form provides for the usual items of income and deductions, and for a statement of principal of and interest on non-taxable securities. However, all interest on United States obligations is excluded from gross income. A schedule showing the beneficiaries' names and addresses together with their respective shares of the net income (allocated so as to indicate separately dividends, capital net gain or loss, income tax paid at

source and income and profits taxes paid to foreign countries) is required. A trust or estate cannot have "earned" income. If part of the income remains undistributed by the fiduciary or is taxable to the grantor, such amounts will appear in the schedule of beneficiaries' shares as taxable to the fiduciary and grantor respectively. The amounts shown in the schedule of beneficiaries' shares should agree with the corresponding items included in the beneficiaries' personal returns.

Returns where Two or More Trusts.—If the same fiduciary is in charge of more than one trust, all created by the same person, the trustee may make one return on form 1041 for them all. If the trustee is in charge of several trusts created by different persons, then a separate return on form 1041 is required for each trust.

Non-resident Alien Beneficiaries.—If a citizen or resident fiduciary has charge of an estate or trust with one or more non-resident alien beneficiaries, form 1040 B must be filed for each such beneficiary and the tax paid as shown thereby, unless any such beneficiary has appointed an agent in the United States to act for him in this matter. Form 1041 is required in addition unless the sole beneficiary of the trust or estate is a non-resident alien when form 1040 B alone will suffice.

TENTATIVE RETURNS.—When an extension of time is granted by the Commissioner for the filing of a return, a so-called tentative return is usually required. Such tentative return is made on the kind of form which will be used for the final return and merely indicates the name and address of the taxpayer and the amount of tax estimated to be due. The word "Tentative" should be plainly written on the front of the return. The **first payment of tax** is based upon the tentative return, adjustment being made when the final and complete return is later filed. Tentative returns are not accepted unless **permission to file them** has been granted by the Commissioner, usually as a condition precedent to extensions. The final and complete return is filed within the period of the extension granted.

A tentative return must be distinguished from an incomplete or imperfect return. The latter cannot be accepted by the Commissioner. If at the due date and after no further extension can be granted, it is still impossible to prepare a complete return, due to lack of data, etc., a return should be prepared in the best way possible under the circumstances. This will not be considered as incomplete, since it is the best that can be produced at the time. When full information is available an amended return should be filed, if any material discrepancy has become manifest.

AMENDED RETURNS.—When it is discovered that a return already filed is erroneous to a material extent, the circumstances should be disclosed in a letter to the Commissioner. If so desired, permission to file an amended return may be requested. However, there are **reasons against the filing of amended returns,** and, in consequence, it is recommended that material changes be reported in letter form with a recomputation of the tax due. Any additional tax need not be paid until demanded. Cases may arise where the changes to be made are so complex that the only satisfactory remedy is to file complete amended returns.

Income

GENERAL.—**Income** is defined by the regulations as "the gain derived from capital, from labor, or from both combined, provided it be understood to include profit gained through a sale or conversion of capital assets." **Net**

income is defined by the law as meaning gross income (excluding non-taxable income) less allowable deductions (including statutory net losses). Such net income will be determined in accordance with the method of accounting regularly employed by the taxpayer if such method, in the opinion of the Commissioner, correctly reflects the income. Taxpayers must keep such records as will enable the Commissioner to verify the amount and method of computation of net income. Where the production, purchase or sale of merchandise is involved, **inventories** at the beginning and end of the taxable year are necessary to compute net income. **Expenditures for capital assets** which have a life beyond the year must be capitalized and not charged to expense. **Renewals** must be charged against depreciation reserves.

CASH OR ACCRUAL METHOD.—If the first of these two methods correctly reflects income, a taxpayer may report income as received and claim deductions as paid, independent of the time of accrual or incurring respectively. This method is called the "cash," "cash receipts and disbursements" or "receipts" method and is largely employed by taxpayers whose income arises from salaries, wages, dividends, interest, etc.

The **accrual method** considers that income is realized whenever a right of action arises or when the income accrues. Expenses are deductible when the liability is incurred. The time of receipt or payment of cash is not a determining factor. For example, an individual sells property on December 30 but is paid therefor on February 2 of the following year. Under the accrual method the income arose on December 30, but under the cash method not until February 2. Similarly, the individual incurs a liability or some expense on November 20 and pays the bill therefor on January 12. Under the accrual method, the expense is considered to have arisen on November 20, but under the cash method on January 12. Again, interest accrued but unpaid at the end of the taxpayer's year is taken into consideration under the accrual method, but under the cash method is not considered until actually received or paid.

Taxpayers may use either the cash or accrual method but not a mixture of both. A merchant whose business requires the use of inventories cannot consistently use the cash method; the use of inventories demands the accrual method. A salesman, however, can use either method since his income is chiefly from compensation for personal services. A taxpayer desiring to report on the accrual basis **must keep books of account,** since the accrual of income and the incurring of liabilities could not be verified otherwise without considerable trouble. Whenever the phrases "paid or incurred" or "paid or accrued" appear in the law, they are to be interpreted in accordance with the accounting method used by the taxpayer.

CHANGE OF METHOD.—Since a change from the cash to accrual method, or vice versa, may result in part of taxpayer's income escaping tax or in deductions being taken twice, such a change may only be made with the permission of the Commissioner. **Application to change** must be made at least 30 days before the close of the period covered by the return. Such application is to be accompanied by a statement showing the classes of items differently treated under each system and specifying all amounts which would be duplicated or entirely omitted as a result of the change. The Commissioner will not grant permission to change the method of reporting if there is no other reason than the reduction of tax liability. Amended returns for past years on the new basis to equalize the adjustment are sometimes required.

CONSTRUCTIVE RECEIPT.—A taxpayer is deemed to have received items of income which have been **credited to or set apart for him without restriction.**

Thus, taxpayers are considered to have received interest when coupons have matured (except in case of default) but have not been collected by the taxpayer. Interest on savings bank deposits becomes income when credited. Dividends on corporate stock are considered as income when unqualifiedly subject to the stockholders' demand. (In practice this means the date of receipt by stockholders.) The distributive shares of partnership profits is considered as income to the members as soon as determined, even though not actually distributed. Where a sale is made or services performed by one person on the understanding that payment is to be made to a third person, the profit or income will be considered as constructively received by the seller or person performing the services. The 2% tax paid by the obligor under a tax-free covenant bond is not constructive income to the bondholder.

PERIOD FOR WHICH INCOME IS COMPUTED.—Net income is computed on the basis of the **taxpayer's annual accounting period.** Usually that period is 12 months. If the taxpayer keeps no books, the calendar year is used as a basis for his return. Books must be kept before a fiscal year basis can be claimed. The time as of which items of income or deductions are to be accounted for depends on the **fundamental rule** that the method used must clearly reflect the taxpayer's income. Each return is supposed to be complete in itself. There is a proper time at which income is considered to arise and at which deductions are to be taken. Deductions not taken in the proper year cannot be taken in some succeeding year. This rule is not strictly followed in large and complicated businesses, since there are always overlapping items of income and deductions.

The period in which income is deemed to arise or in which deductions must be taken is often a matter of discussion. As a general rule, the year of determination governs. Claims for compensation under government contracts constitute income for the year of allowance or determination. Bad debts charged off and subsequently recovered are income for the year of recovery. An award under a workmen's compensation act is deductible in full in the year the award is made. A loss from theft or embezzlement is deductible in the year sustained. The **fundamental question** is: When must the item of income or deductions be included or allowed under good accounting practice? The consensus of opinion among accountants whose experience gives them the right to speak with authority is the controlling factor.

EXEMPT INCOME.—Certain classes of income are by statute excluded from gross income and, hence, are not subject to tax. There are also certain classes of income exempted from taxation by fundamental law. Both of these categories will be considered here. Income which becomes exempt from tax by virtue of the personal exemptions or credits is discussed later.

Life Insurance Proceeds Received by Insured.—The amount received by an insured under life insurance, endowment or annuity contracts up to the aggregate of premiums paid by him is excluded from gross income. Any **excess of receipts over premiums** paid is taxable upon the same basis as any other gain.

Property Acquired by Gift, Bequest, etc.—The value of property acquired by gift, bequest, devise or descent is exempt from tax. Income subsequently received from such property is taxable. Gain or loss to the donee may also subsequently arise when such property is sold. A gift is a voluntary transfer of property without consideration. Many so-called gifts are in reality compensation for services rendered and as such are taxable to the recipients. Thus, **Christmas gifts or bonuses to employees** are generally taxable to the recipients. Pensions paid for prior services rendered by the recipients are

taxable; if paid to one who has rendered no service, a pension is a gift and exempt from tax. A bonus paid by a state or the federal government for war service is exempt.

Interest on State or Municipal Securities.—The interest on obligations of states, territories or political subdivisions thereof, or of the District of Columbia, are excluded from gross income. A statement of the principal of and interest on such securities has to be made in the return if the taxpayer has other income. Generally speaking, the interest on obligations of states and municipalities is exempt from federal income tax. If any taxpayer is not certain as to the status of a particular security, inquiry should be made of the Treasury Department. When **municipal securities** which were issued at a discount are redeemed, the difference between the redemption price and the "basis" to the holder is exempt from tax, to an amount not exceeding the original discount. Thus, if municipal bonds were issued at 94 and retained by the original owner until redemption at 100, the discount of 6 points will be entirely exempt from tax. If part of the same issue of bonds is purchased by another owner at 90 and held to redemption, only 6 points are exempt from tax. **Interest on awards by cities and states,** as for example, in condemnation proceedings, is tax exempt, since such awards are obligations of the cities or states in question.

Interest on Federal Farm Loan Act Securities.—Interest on bonds of Joint Stock Land banks is exempt, as is that on Farm Loan bonds or debentures issued by Federal Intermediate Credit banks. Interest on promissory notes secured by first mortgages to Federal Land banks, Intermediate Credit banks or Joint Stock Land banks is also exempt.

Interest on United States Obligations.—Interest on all the **pre-war bonds** of the United States or its possessions is exempt from federal income tax. Interest on 3½% **Liberty bonds** is also entirely exempt. The interest on **other Liberty bonds** and on other United States obligations issued after September 1, 1917, is free from normal tax and is free from surtax to a limited extent. The taxability of such interest is treated hereinafter under "Income from Liberty bonds." Interest on **postal savings accounts** is exempt.

Income of Foreign Governments.—Income received by foreign governments from investments in domestic securities or interest on bank deposits so received or from any other source in the United States is exempt from tax. The privilege is extended to **foreign ambassadors,** ministers and their households, except that income from any business carried on by them is taxable. **Foreign consuls** and employees are exempt from tax on their fees and salaries if their country allows a similar exemption to American consuls.

Accident or Health Insurance or Compensation.—Amounts received by the insured or his estate or other beneficiaries arising out of accident or health insurance or workmen's compensation acts as compensation for personal injuries or sickness are exempt from tax. Any damages received by suit or otherwise in respect of such injury or sickness is likewise exempt.

Income Derived by States, Etc.—Income derived from the exercise of any essential governmental function or from any public utility by any state, territory or political subdivision thereof, or income of any possession of the United States or subdivision thereof, is exempt from tax. The law makes special provision for dealing with the income of utilities with which states, etc., entered into contracts before September 8, 1916, and should be consulted when occasion arises.

Income from Foreign Ships.—The income of a non-resident individual or foreign corporation which arises exclusively from the operation of ships documented under the laws of a foreign country granting a similar exemption to United States citizens and corporations, is exempt. A list of the foreign countries satisfying this requirement appears in the regulations.

War Risk Insurance, Pensions, Etc.—Amounts received as compensation, family allotments and allowances under the War Risk Insurance and Vocational Rehabilitation Acts or World War Veterans' Act, 1924, or as pensions from the United States for service of the beneficiary or another in the military or naval forces of the United States in time of war, or as a state pension for services rendered by the beneficiary or another, are exempt. Pensions paid by the United States not as the result of war service are taxable.

Building and Loan Association Interest.—The amount received by individuals before January 1, 1927, as dividends or interest from building and loan associations, substantially all the business of which is confined to making loans to members, is excluded from gross income up to a maximum of $300 in any year. Each member of a partnership is entitled to the full exemption of $300 in his individual return.

Minister's House.—The rental value of a dwelling house and appurtenances furnished to an ordained minister is excluded from his income. This does not apply to an allowance made in lieu of a house.

Shipowners' Indemnity Associations.—The receipts of shipowners' mutual protective and indemnity associations, not organized for profit, if no part of the net earnings inures to any private shareholder, is exempt from tax, except that tax is payable on net income from interest, dividends and rent.

China Trade Act Dividends.—Dividends received by a citizen of China, resident therein, from a corporation organized under the China Trade Act 1922, if he is the equitable owner of the stock in such corporation, are exempt from tax.

OTHER EXEMPT INCOME.—The exemptions outlined above arise from specific provisions of the revenue act. Certain other income is exempted because of specific statutory provisions or in accordance with fundamental law.

Salary of the President and Federal Judges.—The salary of the President of the United States and of federal judges is now held to be exempt from taxation. The **salaries of other federal officers and employees** are subject to tax.

Salaries of State Employees.—Compensation paid officers and employees of states or political subdivisions thereof is not subject to tax. The fees of notaries public and the commissions of receivers appointed by state courts are exempt. A distinction is drawn between officers and employees of states and persons appointed for occasional temporary or limited duties. The compensation of the latter class of persons is taxable. Since the District of Columbia, Alaska and Hawaii are not states, employees thereof are subject to tax.

Federal Reserve Bank Dividends.—Dividends received on the stock of Federal Reserve banks by member banks are exempt.

Compensation for Personal Injury.—Compensation for injury to personal or family rights, such as alienation of affection, slander, libel or surrender of right to custody of a minor child, is exempt from tax. Neither alimony nor separation allowances are taxable. Damages for breach of promise are taxable.

Income Accrued Prior to March 1, 1913.—Any claim existing unconditionally on March 1, 1913, and then owned by a taxpayer and all interest accrued thereon prior to that date are exempt from tax whenever received. Interest

accrued prior to March 1, 1913, but received thereafter, is also exempt. Payments received after March 1, 1913, for services rendered prior thereto and for which a claim existed at that date, do not constitute taxable income.

EXEMPT CORPORATIONS.—Certain classes of corporations are specifically exempted from income tax by statute. In order to establish exemption and thus be relieved of the duty of filing income tax returns and of paying the tax, every organization which claims exemption must **file with the local collector an affidavit** showing its character, its purposes, its actual activities, the sources and disposition of its income, and whether any part thereof may inure to the benefit of any private shareholder or individual. A copy of the charter or articles of incorporation, the by-laws, the latest balance sheet and profit and loss statement are required. Certain additional information is required in some cases; details will be found in the current regulations. After the Commissioner has granted exemption, the organization need file no income tax returns unless the character or purposes of the organization change so as to make it subject to tax.

Classifications.—The following summarizes the classes of exempt corporations. For further details the current regulations should be consulted.

1. Labor, agricultural, or horticultural organizations.
2. Mutual savings banks not having a capital stock represented by shares.
3. Fraternal beneficiary societies, orders, or associations, (a) operating under the lodge system or for the exclusive benefit of the members of a fraternity itself operating under the lodge system; and (b) providing for the payment of life, sick, accident, or other benefits to the members of such society, order or association or their dependents.
4. Domestic building and loan associations substantially all the business of which is confined to making loans to members; and cooperative banks without capital stock organized and operated for mutual purposes and without profit.
5. Cemetery companies owned and operated exclusively for the benefit of their members or which are not operated for profit; and any corporation chartered solely for burial purposes as a cemetery corporation and not permitted by its charter to engage in any business not necessarily incident to that purpose, no part of the net earnings of which inures to the benefit of any private shareholder or individual.
6. Corporations, and any community chest, fund, or foundation organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual.
7. Business leagues, chambers of commerce, or boards of trade, not organized for profit and no part of the net earnings of which inures to the benefit of any private shareholder or individual.
8. Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational, or recreational purposes.
9. Clubs organized and operated exclusively for pleasure, recreation, and other non-profitable purposes, no part of the net earnings of which inures to the benefit of any private shareholder.

10. Benevolent life insurance associations of a purely local character; farmers' or other mutual hail, cyclone, casualty, or fire insurance companies, mutual ditch or irrigation companies, mutual or cooperative telephone companies, or like organizations; but only if 85% or more of the income consists of amounts collected from members for the sole purpose of meeting losses and expenses.
11. Farmers', fruit growers', or like associations, organized and operated as sales agents for the purpose of marketing the products of members and turning back to them the proceeds of sales, less the necessary selling expenses, on the basis of the quantity of produce furnished by them, or organized and operated as purchasing agents for the purpose of purchasing supplies and equipment for the use of members and turning over such supplies and equipment to such members at actual cost, plus necessary expenses.
12. Corporations organized for the exclusive purpose of holding title to property, collecting income therefrom, and turning over the entire amount thereof, less expenses, to an organization which itself is exempt from the tax imposed by this title.
13. Federal Land banks, national farm-loan associations and Federal Intermediate Credit banks, as provided in the Federal Farm Loan Act, as amended.

Income From Personal Services

With the exception of certain classes of income considered as exempt (see Exempt Income) the law taxes "income derived from salaries, wages, or compensation for personal service . . . . of whatever kind and in whatever form paid, or from professions, vocations . . . ." In general, compensation for personal services by whatever name called is taxable to the recipient. Thus bonuses, Christmas gifts and pensions paid by employers are usually taxable unless the elements of a true gift are present—a voluntary transfer without consideration. Prizes in newspaper contests represent taxable income. Tips and gratuities are usually taxable to the recipients. Fees paid to the clergy for marriages, baptisms, etc., are taxable to them. Commissions paid salesmen, and compensation on the basis of a percentage of profits are subject to tax. Such compensation will be returned as taxable in the year received, if the taxpayer is on the cash basis, or in the year of accrual or determination if the taxpayer is on the accrual basis.

Compensation Paid Otherwise Than in Cash.—Compensation need not be paid solely in cash to be taxable. The law taxes compensation "in whatever form paid." Payments made by employers for the benefit of employees or privileges granted employees may represent taxable income. Payment for services may be made in property of various kinds. The fair value of such property constitutes income from personal services.

Payments in Property.—Compensation paid in **stock of a corporation** represents income to the extent of the fair market value of such stock when available to the employee. If the stock has no determinable market value, no income will be reported until the recipient sells the stock. When **notes or other evidences of indebtedness** are received in payment, the fair discounted value at time of receipt is income to the recipient. The discount will be taken up as income when the obligation is met. If the notes could not be discounted except at a substantial loss, no immediate income is returned but the entire proceeds when collected will be taxable. If **board and quarters** are provided

by an employer, their fair value represents income to the employee, unless such provision is made for the convenience of the employer and the employee has no option in the matter. Allowances for meals and lodging ordinarily represent income to the employee. The value of services furnished employees, use of automobiles, heat and light, telephone, etc., represent taxable income to them.

Compensation Constructively Received.—Payments made by employers on behalf of employees represent constructive income to the employees. Examples are tuition fees, insurance premiums (other than group insurance) and allowances on the purchase price of stock. Deductions made from compensation for pension funds must be included in income by employees.

EARNED INCOME.—The 1924 law introduced a differentiation for taxation purposes between "earned" income as defined therein and other income. The necessary computations resulting from this classification will be discussed hereinafter under "Credits." Earned income means wages, salaries, professional fees and amounts received as compensation for **personal services actually rendered,** but excludes any compensation which represents a distribution of the earnings or profits of a corporation. In the case of a taxpayer engaged in a business in which both personal service and capital are material income producing factors, the earned income cannot exceed 20% of his share of the profits. This limitation applies also to partnerships whose business is of a similar character. The limitation does not apply to professional partnerships where capital is not a material income-producing factor. Estates and trusts cannot have earned income. To arrive at the **"earned net income,"** a deduction is made for expenses properly allocable to or chargeable against earned income. In no case may the earned net income exceed $10,000. If a taxpayer's net income from any source is not more than $5,000, the whole amount is considered as earned. Even if the taxpayer's net income exceeds $5,000, the amount considered as earned cannot be less than $5,000. Partnership returns are designed to show the earned net income applicable to each member thereof.

Income From Business

A separate schedule is provided on all returns for the computation of income from business. This schedule provides for the use of inventories where necessary to arrive at the cost of sales. The subject of inventories is treated later. Generally speaking, the determination of **gross income in a business** is not difficult since the problem is chiefly that of ascertaining the net sales. In the case of the sale of real and personal property on the instalment plan and in the case of long-term contracts, certain peculiar features are encountered which will be discussed separately later. In a few cases it is important to determine when the income from sales arises, but the only difficult problems of business income relate to income other than from sales.

When Does Income Arise?—When goods are exported against drafts, income does not usually arise until the drafts are accepted or the purchase price paid. Goods sent out on consignment do not produce taxable income until the consignee actually sells the goods. In the case of conditional sales, income arises when title passes. If the proceeds of sale are placed in escrow, income does not arise until there is a release to the seller.

Long-Term Contracts.—Such contracts are those for building, installation or construction covering a **period of more than one year.** Such contractor may report income on one of two bases:

1. Gross income may be reported in the year of completion. All expenditures applicable to the contract whenever incurred will then be deducted in the same year, allowance being made for inventories, etc.

2. Gross income may be reported upon the basis of percentage of completion of the contract. Deductions are allowed for expenses paid or incurred each year, adjustments being made for inventories, etc.

Other Taxable Business Income.—Taxes paid by the vendor for the vendee, forfeited stock subscriptions, land donated by Chamber of Commerce, have been held by the Treasury to be taxable. The courts have held, in one case, that a subsidy to a railroad did not constitute taxable income to the railroad.

Non-Taxable Business Income.—The following classes of income are not considered taxable: Intercompany or interdepartmental profits, voluntary assessments paid by stockholders, proceeds of business life insurance policies, cash discounts on capital expenditures, profit on sale of corporation's own stock.

Purchase of Own Bonds at Discount.—The Treasury holds that when a corporation purchases its own **bonds** at less than the issue price plus any discount amortized to date, and retires them, a profit is realized. It is also held that when a creditor forgives and cancels an indebtedness without desiring to benefit the debtor, taxable income to the debtor arises. The question of whether income arises from the **liquidation of a liability for less than its book value** is now before the courts.

Foreign Exchange.—The **current assets of a foreign branch** should be inventoried at the rate of exchange on the last day of the year. **Capital assets** are valued at the rates prevailing when acquired. Remittances are allowed for at the rate prevailing when transmitted. The Treasury publishes the rates to be used at the end of each calendar year; rates for other dates must be obtained from reliable sources.

Inventories

GENERAL.—Whenever the Commissioner considers the use of inventories necessary to determine net income, such inventories shall be taken on the basis prescribed by the Commissioner. Inventories must be taken as of one date for an entire business. **Book inventories** may be used if periodical tests show them to be reasonably accurate. Businesses requiring the purchase and sale of, or trading in merchandise, must generally use inventories. In addition, dealers in securities, in foreign exchange, in second hand automobiles, as well as farmers and cotton planters, may use inventories. **Dealers in real estate** are not permitted to use inventories. Inventories include all finished goods, partly finished goods, raw materials and supplies, the title to which was vested in the taxpayer at the inventory date. Goods in transit will be included by the purchaser if title has passed from the vendor. Bailees will not inventory the property of others in their custody. C.O.D. shipments are included in the inventory if not accepted and paid for by the purchaser at the inventory date.

VALUATION OF INVENTORIES.—Inventories are, in general, valued on one of three bases:

1. Cost
2. Cost or market whichever is lower
3. Market

The first two methods are applicable to ordinary businesses, while the **third applies only to dealers in securities,** giving this class of business a third choice of method. For the year 1920 taxpayers were given an option to select either the cost, or cost or market method. The election made in that year is binding for all years thereafter unless permission to change the basis has been granted by the Commissioner. Permission to change is granted upon application if a reasonable cause is shown.

The Treasury regulations do not permit the use of the following inventory methods:

1. Deduction of a reserve for price changes or for estimated depreciation.
2. Valuation of any part of the inventory at a nominal price or at less than its proper value.
3. Omission of portions of stock on hand, unless obsolete or unsalable.
4. Use of a constant price or nominal value for so-called normal quantity of material.
5. Inclusion of merchandise the title to which has not vested in the taxpayer.

INVENTORIES AT COST.—Cost means—

1. The inventory price of goods on hand at the beginning of the year.
2. The invoice price, less trade discounts, of merchandise purchased, plus transportation and other charges incurred in acquiring possession.
3. The cost of raw materials and supplies consumed in manufacturing by the taxpayer plus direct labor plus overhead properly applied. Interest on investment may not be included, nor may selling expenses.

Where a taxpayer produces by a single process or series of processes a product of several grades or sizes, an allocation of cost on the basis of selling values may be used. In the **tobacco industry** an average cost method is permitted, although this privilege is not extended to other industries, as for example, grain.

INVENTORIES AT MARKET.—Market means the **current bid price** prevailing at the inventory date for the particular merchandise in the volume usually purchased by the taxpayer. If no open market exists, or if quotations are nominal, the best available evidence must be relied on. If the taxpayer has offered merchandise for sale below the current market, such offered price less selling expenses may be used for inventory purposes. The Treasury holds that goods on hand or in production for firm sales contracts must be valued at cost.

COST OR MARKET.—If the basis of cost or market, whichever is lower, is used, each item must be priced at cost and market, and the lower value for each separate item included in the inventory. The basis does not mean that the whole inventory is to be priced at cost, then at market and the lower of the two totals used; each item on the inventory is valued separately.

OBSOLETE, DAMAGED GOODS.—Allowances must be made in inventory valuations for obsolete, unsalable or damaged stock. Excessive quantities, too, may warrant a special valuation. The burden of proof of the valuation is on the taxpayer. Valuations, however, are not generally questioned unless some suspicious circumstances indicate the necessity for investigation.

RETAIL METHOD.—Certain merchants, chiefly dry goods stores, are allowed to use the so-called retail method. This method is based upon the retail selling price, adjustments being made which are supposed to reduce the inventory to cost or market, whichever is lower. The Treasury rulings should be consulted for details of the method.

FUTURES.—The Treasury permits the inventorying of such futures as constitute hedges against actual spot or cash transactions.

INVENTORY CERTIFICATE.—In all cases where inventories are used, form 1126 must be filed. This form calls for certificates as to the method employed in taking and pricing the inventory.

Sale of Property on Instalment Plan

FOUR TYPES OF SALES RECOGNIZED.—Special privileges are accorded to vendors of personal and real property under certain types of contracts providing for payments in instalments. The Treasury recognizes **four types of sales:** (1) for cash; (2) on personal credit; (3) initial cash payment not exceeding 25% of the sales price, the balance being payable in numerous comparatively small payments; (4) initial cash payment exceeding 25% of the sales price, the balance being payable in any way agreed by the parties to the contract. Sales in class (3) are considered as on the **instalment plan;** those in class (4) as involving **deferred payments.** These two classes of sales will be considered in order.

INSTALMENT PLAN DEFINED.—The regulations consider as instalment sales those "in which the initial payment is relatively small (generally less than one-fourth of the purchase price) and the deferred payments numerous and of small amount." The conditions governing the passing of the title are not considered, since it makes no difference as far as income tax is concerned whether title passes immediately to the vendee or if it remains in the vendor until all or a specified part of the purchase price is paid. The instalment plan applies to sales of both real and personal property. It is largely used by vendors of real estate, furniture, phonographs, pianos, radio sets, etc. It cannot generally be used by automobile dealers, since in the sales of automobiles, an initial payment of at least 30% is required (but see Deferred Payment Sales).

COMPUTATION OF TAXABLE INCOME.—If the vendor so desires, he may return for taxation the full profit on the transaction in the year in which consummated. No taxable income will then arise when the instalments are collected. If he wishes to take advantage of the instalment plan, the income to be returned by him will be that proportion of each instalment payment which the gross profit to be realized when the property is paid for bears to the gross contract price. Thus it is necessary to ascertain the percentage which the gross profit for each year bears to the instalment sales in that year. By applying this percentage to the cash collections on account of such instalment sales (the collections on account of each year's sales being considered separately) the gross profit to be returned each year is ascertained. Cash collections on instalment sales consummated before the taxpayer commences to use the instalment plan for computing taxable income are not considered in these computations, since the gross profit on the sale has been previously reported.

As an **illustration** of the method of computation consider the following:

	Collections made during 1926	(a) Instalment Sales Contracts (sales made during respective years)	Cost of goods Sold in Respective Years	(b) Unrealized Profits on Instalment Sales Contracts	Per Cent Gross Profit Ratio of (b) to (a)
Applicable to 1925.....	$ 2,000	$30,000	$24,000	$ 6,000	20%
Applicable to 1926.....	8,000	50,000	37,500	12,500	25%
	$10,000	$80,000	$61,500	$18,500	

To ascertain the gross profit considered as realized in 1926, apply the percentages to the collections:

1925, 20% of $2,000	$ 400
1926, 25% of $8,000	2,000
Realized gross profit, 1926	$2,400

When the instalment sales are made, the gross profit is credited to an unrealized gross profit account. From this account there is transferred to earned surplus year by year the realized gross profit computed as above. The accounting records must be kept in such a way as to indicate clearly the computation of realized gross profit. Unless this is done, the use of the instalment plan may be denied.

DEFAULTED CONTRACTS.—If the purchaser defaults in the payment of his instalments, and the seller repossesses the property, the seller will return as income in the year of repossession the entire amount received on instalment payments, less the profits thereon already returned. The **property repossessed** must be included in the inventory at original cost to the vendor less depreciation and damage, if any, which means market value.

TREATMENT OF EXPENSES.—The instalment plan applies only to the computation of gross income from instalment sales. Although it would seem logical to defer in a similar way at least part of the expenses incurred in making such sales, such a procedure is not permitted. All expenses must be deducted in the year of payment or when the liability is incurred, dependent on whether the cash or accrual method is used. Any statutory net losses arising from this procedure may be carried forward in the ordinary way. (See Deductions for Net Losses, page 1601.)

Board of Tax Appeals not in Agreement.—The United States Board of Tax Appeals in its rulings up to the present time has held as invalid the method prescribed by the Regulations for computing net income from instalment sales. In view of the benefits derived by so many concerns from the Treasury's liberal attitude in the past it may be expected that the Tax Board's position will be modified or the Treasury will have to insist that its past procedure be legalized by means of an amendment to the law.

SALE OF REAL ESTATE IN LOTS.—When a tract of land is acquired for subdivision, the **cost** must be equitably **apportioned to the various lots,** a record being made on the books of the taxpayer. This allocated cost will be used as a basis for computing gain or loss on every lot sold. It is not permissible to treat the tract as a whole, crediting all sales against cost until the latter is extinguished. There is a measure of gain or loss in every lot sold, unless the selling price is identical with the allocated cost.

DEFERRED-PAYMENT SALES.—When the initial payment exceeds 25% of the selling price, the contracts are treated as deferred-payment sales. Under this method gain or loss is recognized at the time of sale to the extent of the difference between the amount of the initial payment plus the fair market value of the notes or other obligations received and the cost or other basis. If, then, the obligations of the purchaser are readily marketable, the profit will be taxable in the year of sale. However, if the purchaser's obligations could not be sold at a reasonable discount, the collections thereon and the initial payment are credited against the cost or other basis of the property no profit being realized until the total receipts exceed the cost or other basis. In some cases decided by the Treasury where the notes could be discounted

only at a sacrifice, the sales were considered to be on the instalment plan. It is possible, therefore, in some instances that automobile sales may be so considered.

CAPITAL GAINS.—The capital gain and loss provisions (q. v.) apply to instalment and deferred-payment sales.

Income from Interest

All interest not specifically exempt (see Exempt Income) is to be included in gross income. Interest accruing prior to March 1, 1913, is not taxable. Taxpayers on the accrual basis must accrue all collectible interest, while those on the cash basis, return only interest collected or available for collection.

DISCOUNT ON BONDS.—Since bond discount is an interest adjustment, the purchaser of bonds issued at a discount realizes income to the extent of the discount when such bonds are redeemed at par. However, such income is usually returned under the category of income from sales of securities. (For the treatment of municipal bonds issued at a discount, see Exempt Income.) The Treasury holds that the obligor on bonds issued at a discount realizes taxable income if such bonds are repurchased and retired by the obligor at less than the issue price plus accrued discount. This matter is now before the courts for decision.

SECURITIES ACQUIRED BETWEEN INTEREST DATES.—When the buyer pays to the seller the accrued interest from the last interest date to the date of sale, each should return as income the portion of the interest coupon assignable to the period during which each respectively held the securities.

ANNUITIES.—Annuities are in general taxable to the extent that the aggregate receipts exceed the payment made by the annuitant for the contract. If the annuity arises from a gift prior to December 31, 1920, the basis will be the value of the contract at the date of gift and not its cost.

BUILDING AND LOAN ASSOCIATION.—Interest or dividends, above the exemption of $300 per annum up to and including 1926, is taxable if available to the shareholder. If the interest is not available until the maturity of the contract, it must be returned as a whole at that time. As a rule, part of the interest is immediately available when credited, the remainder becoming available only if the shares are held to maturity. The available interest should be returned in the year it is credited.

TAX-FREE COVENANT BONDS.—No tax paid by the obligor under bonds containing a tax-free covenant clause need be returned as income by the obligee. However, interest received from such bonds must be shown separately on returns.

FEDERAL GOVERNMENT, STATE AND MUNICIPAL SECURITIES.—The interest on **all Liberty bonds** is **free from normal tax.** The **exemption from surtax** applicable to such interest is as follows:

1st 3½% Liberty bonds, totally exempt.
4% and 4¼% Liberty bonds, exemption of interest up to July 2, 1926, on an aggregate principal of $50,000.

In addition to the above, the interest on an aggregate principal of $5,000 of 4% and 4¼% Liberty bonds, Treasury 4¼% bonds, Treasury certificates (of indebtedness) and Treasury (war) savings certificates, is exempt from normal and surtax without limitation of time. Liberty bond interest is to be returned

as accruing or as received, depending on the basis of reporting income used by the taxpayer.

The exemptions are computed upon the actual principal. If at any time the maximum exemption is exceeded, the interest on the excess is subject to surtax for the period the maximum exempt principal is so exceeded.

All interest on **Treasury notes** is subject to surtax; there is no exemption. **Treasury 4 1/4% bonds, certificates of indebtedness, and war savings certificates** are included with 4% and 4¼% Liberty bonds in the aggregate $5,000 principal exemption stated above.

As heretofore stated, interest on **state and municipal** securities is non-taxable. (See Exempt Income.)

CORPORATIONS.—As a corporation pays only a normal tax, interest on all United States obligations received by it is exempt.

PARTNERSHIPS AND FIDUCIARIES.—Interest from all United States obligations and from state and municipal securities is excluded from Forms 1065 and 1041. Such amounts will be considered by the individuals in preparing their own returns, each taxpayer being entitled to his full separate exemption.

NON-RESIDENT ALIENS.—Interest on all United States obligations is exempt from tax while beneficially owned by non-resident aliens, foreign corporations, partnerships or associations not engaged in business in the United States.

Income from Sales and Exchanges

The principles underlying the determination of both gains and losses from sales or exchanges of property are so nearly identical that both the taxable gains and deductible losses arising from such transactions will, for convenience, be discussed together. However, it must be noted that this subject is one of the most intricate and involved in the whole realm of income taxation so that only a general outline can be presented here. For more comprehensive treatment reference must be made to the relevant chapters in Montgomery's "Income Tax Procedure."

SPECIAL DEFINITIONS.—Certain statutory definitions relating to certain phases of sales and exchanges must be kept in mind in considering this subject:

The term **"reorganization"** is given a special definition by statute as meaning (1) a merger or consolidation (including the acquisition by one corporation of at least a majority of the voting stock and at least a majority of the total number of shares of all other classes of stock of another corporation, or substantially all the properties of another corporation); or (2) a transfer by a corporation of all or a part of its assets to another corporation if immediately after the transfer the transferor or its stockholders or both are in control of the corporation to which the assets are transferred; or (3) a recapitalization; or (4) a mere change in identity, form, or place of organization, however effected.

The term **"a party to a reorganization"** includes a corporation resulting from a reorganization and includes both corporations in the case of an acquisition by one corporation of at least a majority of the voting stock and at least a majority of the total number of shares of all other classes of stock of another corporation.

The term **"control"** means the ownership of at least 80% of the voting stock and at least 80% of the total number of shares of all other classes of stock of the corporation.

A distribution in pursuance of a plan of reorganization, by or on behalf of a corporation a party to the reorganization, of its stock or securities, or stock or securities in a corporation a party to the reorganization, is not considered a distribution of earnings or profits within the meaning of subdivision (b) of Section 201 for the purpose of determining the taxability of subsequent distributions by the corporation.

GENERAL RULE FOR RECOGNITION OF AMOUNT OF GAIN OR LOSS.—Except as otherwise provided by law and stated hereinafter, the gain from the sale or other disposition of property shall be the excess of the amount realized therefrom over the "basis" as hereinafter described, and the loss shall be the excess of such basis over the amount realized. In other words, gain or loss is recognized in all sales or other dispositions of property unless special provision is made by statute for no gain or loss to be recognized in certain cases. The amount realized from the sale or other disposition of property shall be the sum of any money plus the fair market value of the property (other than money) received.

In computing the gain or loss **proper adjustment** is to be made for (1) capital improvements and betterments made since the date of acquisition or other basic date and for carrying charges, such as taxes on unproductive property, and (2) for any item of loss, depreciation, depletion, amortization or similar deductions previously allowed with respect to the property. Thus, if property was purchased in 1922 at a cost of $10,000 and capital expenditures thereafter amounted to $5,000, but depreciation of $2,000 had been allowed thereon, the basis in the case of sale would be $10,000 plus $5,000 minus $2,000, or $13,000. A sale for $15,000 would indicate a gain of $2,000, while a sale for $10,000 would give a loss of $3,000. The law states that the foregoing provisions are not to be construed to prevent the use of the instalment sales method, as outlined under "Income from Instalment Sales."

Having outlined the general basis for the recognition of the **amount** of gain or loss, it is now necessary to consider its application to special cases under the headings, (1) recognition of gain or loss, and (2) determination of the "basis."

Recognition of Gain or Loss from Sales and Exchanges

NO GAIN OR LOSS RECOGNIZED.—The law provides for the recognition of gain or loss as previously outlined in all cases except the following:

In certain classes of transactions no gain or loss is recognized. Such cases are:

1. Exchange of property held for productive use in trade or business or for investment (but excluding stock in trade or other property held primarily for sale, and stocks, bonds, notes, choses in action, certificates of trust or beneficial interest or other securities or evidences of indebtedness or interest), solely for property of a like kind to be held either for productive use in trade or business or for investment. An **exception** is made when common stock in a corporation is exchanged solely for common stock in the same corporation, or preferred stock for preferred stock under similar conditions, so that no gain or loss is recognized in such cases.

Gain or loss will be recognized if, say, Pennsylvania Railroad stock is exchanged for American Woolen Co. stock, or if real estate is exchanged for personal property.

2. Stock or securities in a corporation a party to a reorganization exchanged, in pursuance of the plan of reorganization, solely for stock or securities

in such corporation or in another corporation a party to the reorganization.

This provision permits stockholders in reorganization to receive other stock or securities such as bonds in exchange for their prior stock or securities without the recognition of gain or loss.

3. A corporation which is a party to a reorganization exchanges property in pursuance of the plan of reorganization, solely for stock or securities in another corporation a party to the reorganization.

Under this exception a corporation can in a reorganization sell its property to another corporation without the recognition of gain or loss.

4. Property transferred by one or more persons to a "controlled" corporation solely in exchange for stock or securities of such corporation, provided that where there is more than one transferor the amount of stock or securities received by each is substantially in proportion to his interest in the property prior to the transfer.

Thus, an individual can form a corporation to hold some of his property as long as he receives over 80% of the voting and other stock in the corporation, without the recognition of gain or loss.

5. Compulsory or involuntary conversions of property into (a) property similar or related in service or use, or (b) money, if such money is forthwith expended in the acquisition of similar or related property, or in the acquisition of control of a corporation owning such property, or in the establishment of a replacement fund to be subsequently applied to similar uses.

Such cases are in condemnation proceedings or seizures whether actual or imminent. If a replacement fund is to be established the Commissioner's rules therefor, as set forth in the regulations, must be followed. Gain (but not loss apparently) is recognized if any part of the money received is not expended, but not in excess of the amount unexpended.

NO LOSS RECOGNIZED.—No loss will be recognized in cases (1), (2), (3), or (4) as outlined above under "No Gain or Loss Recognized" even if money and/or other property is received in addition to the property therein specified. It will be noted later that gain will be recognized under such conditions, with one exception, but no loss will be recognized. This provision was inserted to prevent the deduction of losses by the expedient of adding a small amount of money or other property in the exchange.

NO GAIN RECOGNIZED.—In the following cases the statute provides that no gain is recognized:

1. A distribution, in pursuance of a plan or reorganization, to a stockholder in a corporation a party to the reorganization of stock or securities in such corporation or in another corporation a party to the reorganization, without the surrender by the stockholder of his stock or securities in such corporation.
2. A corporation, in pursuance of a plan of organization, exchanges property for stocks or securities in another corporation together with money and/or other property, distributing such money and other property, if any, to its stockholders.

No gain is recognized to the corporation in case (2), but gain may accrue to the stockholder.

GAIN RECOGNIZED.—

1. Gain is recognized in cases (1), (2) and (4) as outlined under "No Gain or Loss Recognized" if, in addition, money or other property is received.

However, the amount of the gain so recognized is limited to the extent of such money and other property, if any. The money or other property received in these transactions is usually referred to as "boot." The receipt of "boot" immediately results in the limited recognition of gain but does not permit the deduction of loss. If the distribution made in the cases outlined above has the effect of a taxable dividend, then the amount of gain recognized shall be taxed to the distributee as a dividend to the extent of his ratable proportion of the undistributed earnings and profits accumulated after February 28, 1913, the balance being taxed as a gain from the exchange of property.

2. In a case similar to case (2) under "No gain recognized" gain is imputed to the corporation if the "boot" is not immediately distributed to stockholders.

As in the foregoing cases, the gain so computed is limited to the amount of the "boot."

Illustrations of transactions of most of the classes outlined in the foregoing paragraphs will be found in the regulations and are discussed in Montgomery's "Income Tax Procedure."

Determination of Basis

As regards **property acquired after February 28, 1913,** the basis for determining gain or loss is cost except in the following cases:

INVENTORIED GOODS.—If the property should have been included in the last inventory, the **last inventory value** shall be used.

GIFTS AFTER DECEMBER 31, 1920.—In the case of property acquired by gift after December 31, 1920, the basis to be used by the donee is that **which would have been used by the donor or by the last preceding owner by whom it was not acquired by gift.** If the donee is unable to ascertain such basis, it shall be determined by the Commissioner.

TRANSFERS IN TRUST AFTER DECEMBER 31, 1920.—The basis to be used for property acquired by a transfer in trust after December 31, 1920 (other than by a transfer or trust by bequest or devise) is that **which would have been used by the grantor plus any gain or minus any loss recognized to the grantor at the time of transfer.** This provision does not apply to property acquired under transfers or trust in contemplation of or intended to take effect in enjoyment or possession at the grantor's death, nor when the trust is revocable by the grantor alone or in conjunction with any person or where the grantor relinquished his power to revoke in contemplation of death, nor to property received under the exercise of a general power of appointment by will or deed executed in contemplation of or intended to take effect in possession or enjoyment at or after death.

The foregoing is inconsistent with other sections of the law and will have to be judicially interpreted before it can safely be relied on.

GIFTS OR TRANSFERS IN TRUST ON OR BEFORE DECEMBER 31, 1920.—In the case of property acquired on or before December 31, 1920, by gift or by transfer in trust, the basis is the **fair market value of the property at the time of such acquisition.**

BEQUESTS, DEVISES, ETC.—The basis to be used for property acquired by bequest, devise or inheritance shall be the **fair market value of such property at the time of such acquisition.** This includes the transfers excepted under Transfers in Trust after December 31, 1920 (outlined above).

NON-TAXABLE EXCHANGES.—Where property is acquired in exchanges upon which no gain or loss is recognized (outlined hereinbefore), the basis to be used is **that applicable to the original property.** If the exchange would have been non-taxable except for "boot" being received, the basis will be that of the old property decreased by the amount of any money received plus any gain recognized in the exchange. In those cases where the "boot" or part thereof is property other than cash, an allocation is to be made between the "boot" and other property so that the fair market value of the "boot" is allocated thereto.

CERTAIN REORGANIZATIONS AFTER DECEMBER 31, 1917.—The basis to be used for property (other than stock or securities in a corporation a party to the reorganization) acquired after December 31, 1917, by a corporation in a reorganization when an interest or control of 80% or more remains in the transfers of such property, will be the **same as it would be in the hands of the transferor, plus any gain or minus any loss recognized to the transferor at the time of transfer.**

CERTAIN REORGANIZATIONS AFTER DECEMBER 31, 1920.—When property (other than stock or securities in a corporation a party to a reorganization) has been acquired after December 31, 1920, by a "controlled" corporation, the basis to be used is that which **would have been used by the transferor plus any gain or minus any loss recognized to the transferor at the time of transfer.**

SECURITIES DISTRIBUTED AFTER DECEMBER 31, 1923.—When stock or securities are distributed in a reorganization to stockholders without the surrender of their old stock, the basis in respect of the stock on which the distribution was based is **to be apportioned between the old and new securities on the basis of values at the time of distribution,** except that that part of the basis allocated to the new stock may not exceed its fair market value when distributed.

INVOLUNTARY CONVERSIONS.—The basis to be used in such cases is the basis applicable to the property converted less any money not expended in similar property plus any gain or minus any loss recognized at the time of conversion.

WASH SALES.—In the case of "wash sales" after December 31, 1920, the basis to be used for the new stock will be that of the old stock plus the excess of the repurchase price of the new over the sale price of the old or minus the excess of the sale price of the old over the repurchase price of the new.

STOCK DIVIDENDS.—When stock dividends are received there is no tax thereon, but for use when and if the new or old stock is sold, the basis applicable to the stock upon which declared must be allocated between the new and old stock as follows:

1. When the dividend stock is of substantially the same character or preference as the old, the basis of each share of old and new will be the quotient of the basis of the old divided by the total number of old and new shares.
2. When the dividend stock is of a materially different character or preference, the basis of the old stock will be divided between the old and new stock in proportion to the respective values of old and new

stock at the time the latter is issued. The proportion of the basis applicable to the new stock cannot exceed the fair market value of the new stock at the time of issuance.

3. If the identity of shares purchased and sold cannot be established, sales of the original stock are applied to the earliest purchases of the original stock and sales of dividend stock to that issued in respect of the earliest purchases of the original stock.

PROPERTY ACQUIRED BEFORE MARCH 1, 1913.—The basis to be used in the case of property acquired before March 1, 1913:

1. Cost or basis outlined above under inventoried goods, gifts or transfers on or before December 31, 1920 or bequests, devises, etc., as the case may be, or
2. Fair market value of the property as at March 1, 1913 **whichever is higher.**

What the fair market value was at March 1, 1913, is a fact to be determined by competent evidence. Due regard must be given to the fair market value of corporate assets in determining the value of the stock of the corporation. For a discussion of the valuation of specific types of property see Montgomery's "Income Tax Procedure."

Sales of Capital Assets

While the rules relative to the determination and recognition of gain or loss apply to all sales and exchanges, **special tax computations** have to be made in connection with the gain or loss arising from the sale or exchange of a special class of property, which comes within the statutory definition of capital assets. The tax computations are outlined hereinafter under Rates and Computation of Tax. It is considered advisable to discuss at this point the statutory definitions applicable to capital assets.

CAPITAL ASSETS DEFINED.—The term "capital assets" means property held by the taxpayer for more than 2 years (whether or not connected with his trade or business), but **does not include stock-in-trade** of the taxpayer or other property of a kind which would properly be included in the inventory of the taxpayer if on hand at the close of the taxable year, or **property held by the taxpayer primarily for sale** in the course of his trade or business.

APPLICATION OF THE 2-YEAR PROVISION.—The specific property must in general have been held for more than 2 years. However, **stock dividend shares** are considered to have been held as long as the stock upon which declared. Similarly in exchanges where no gain or loss is recognized, the new property takes the status of the old. When property is acquired by inheritance, the 2-year period runs from the decedent's death. When property is acquired by gift, the 2-year period commences at the date of gift.

CAPITAL GAINS AND LOSSES.—The term "capital gain" means **taxable gain** from the sale or exchange of capital assets consummated after December 31, 1921. The Treasury holds that the redemption of bonds at maturity is not a "sale or exchange." Holders should sell bonds before maturity, if possible and if desirous of obtaining the benefit of the capital gains provision. The term "capital loss" means **deductible loss** resulting from the sale or exchange of capital assets.

CAPITAL AND ORDINARY DEDUCTIONS.—**Capital deductions** are those allowed by law for the purpose of computing net income but which are allocated to or chargeable against capital assets sold or exchanged during the

taxable year. This includes items of expense connected with the sale or exchange of a capital asset, such as brokers' commissions. **Ordinary deductions** are those allowed for the purpose of computing net income, other than capital losses and capital deductions.

Ordinary net income means the net income as ordinarily computed under the law but after excluding all items of capital gain, capital loss and capital deductions.

CAPITAL NET GAIN AND LOSS.—This is defined to be the excess of the total amount of capital gains over the sum of (1) capital deductions and capital losses plus (2) the excess, if any, of ordinary deductions over gross income computed without the inclusion of capital gain. **Capital net loss** means the excess of the sum of the capital losses plus capital deductions over the total amount of capital gains. For the computations necessary in the case of capital net gains and capital net losses, see Rates and Computation of Tax hereinafter. For the application of statutory net losses when capital net gains or capital net losses occur in subsequent years, see Deductions for Net Losses.

Income from Dividends

Dividends under the law comprise any distributions, whether **in money or in other property,** in the ordinary course of business, even though extraordinary in amount, made by any corporation out of its earnings or profits accumulated since February 28, 1913. In addition to dividends so defined, consideration must also be given to **distributions in liquidation** (so-called liquidating dividends), distributions from sources other than earnings or profits accumulated since February 28, 1913, and stock dividends. Dividends as defined by statute constitute gross income of the recipients and are taxable at the rates of tax in force for the year when received or when subject to the demand of stockholders. With the exception of earnings prior to March 1, 1913, no cognizance is taken of the period during which the earnings have been accumulated by the paying corporation. The owner of record is liable for the tax due, unless he discloses the name and address of the true owner.

CREDITS AND DEDUCTIONS FOR DIVIDENDS.—Individuals are allowed a credit for the purpose of normal tax only of certain dividends. Corporations deduct from gross income certain classes of dividends. These credits and deductions are treated hereinafter under Credits and Deductions for Dividends, respectively.

NON-TAXABLE DISTRIBUTIONS.—These may be classified as follows:

1. Distributions from earnings or profits accumulated or increase in value accrued prior to March 1, 1913.
2. Distributions in partial or complete liquidation—to the extent of capital returned.
3. Distributions not under 1 or 2, to the extent of capital returned.
4. Distributions of earnings of personal service corporations accumulated 1918-1921.
5. Distributions of stock and/or securities in another corporation which is a party to a reorganization.

Stock dividends do not constitute "distributions."

Distributions of classes 1 and 3 to be non-taxable can be made only after all earnings or profits accumulated since February 28, 1913, have been distributed. In other words, all taxable distributions must be completed before

non-taxable ones will be recognized. Under the law every **distribution** is made **from the most recently accumulated earnings or profits.** The earnings to be used will be those shown by the books (not tax returns), adjustments being made for any departures from good accounting practice.

Distributions of class 1 include those made from surplus at March 1, 1913, or from appreciation accrued prior to that date but realized thereafter. Those in class 3 include distributions of unrealized appreciation accrued subsequent to March 1, 1913, also from depreciation and depletion reserves. To the extent that distributions in class 3 do not exceed the basis applicable to the stock on which they are declared, they are tax-free.

Personal service corporations were treated for tax purposes in the same manner as partnerships in the years 1918 to 1921 inclusive. Since the earnings of those years were taxed to the stockholders at that time, distributions therefrom (class 4) are non-taxable. Earnings accumulated subsequent to December 31, 1921, must be distributed first.

If in a reorganization a corporation receives stock and/or securities in another corporation, a party to the reorganization, and immediately thereafter distributes the stock to its stockholders, such a distribution (class 5) is not taxable.

Distributions in complete or partial liquidation are treated as payments for the sale of part or all of the stock. If in excess of the cost or other basis, such excess is taxable; if less than the basis, then the deficiency is deductible as a loss. Partial liquidations include the complete cancellation or redemption of a part of a corporation's stock or one of a series of distributions in complete cancellation or redemption of all or a portion of its stock. The provisions relating to capital gains and capital losses (q.v.) are applicable to distributions in liquidation.

STOCK DIVIDENDS.—A stock dividend is one declared by a corporation, payable in stock of the same corporation. As a result, **surplus is capitalized.** The stock distributed need not be of the same class as that upon which the stock dividend is declared. Stock dividends are not "distributions." They are **not subject to tax** unless the declaration thereof is merely a subterfuge for the declaration of a cash dividend, as a result of previous or subsequent cancellation or redemption of the stock issued as a dividend. The courts have held that where a corporation declares a cash dividend which is to be used solely to purchase additional stock, such dividend is to be treated as a stock dividend. This procedure will have to be followed in any state not permitting stock dividends. Due to the non-taxability of stock dividends, certain computations are necessary to determine gain or loss upon disposition of any of the dividend stock or of the stock upon which stock dividends have been declared. The necessary computations have been outlined hereinbefore under Income from Sales.

MISCELLANEOUS.—Taxes paid by banks on capital stock on behalf of stockholders no longer constitute additional dividends to such stockholders.

When the **salaries paid to executives** of corporations are deemed excessive by the Treasury, they are treated as dividends to the extent of such excess, if the salaries paid bear a close relationship to the stock holdings.

If any tax is deducted at source from foreign dividends such tax must be added back to the amount actually received in returning the income from such foreign dividends. A credit for part or all of such tax may be obtained in certain cases (see Credit for Foreign Taxes, page 1614).

DIVIDENDS PAID OTHERWISE THAN IN CASH.—Most dividends are paid in cash. If, however, a dividend is paid in **stock of another corporation** (not as part of a reorganization scheme nor in partial liquidation), or in **bonds of the same or another corporation** or in Liberty bonds, or in other property, such dividend is to be returned at the fair market value of the property when received. **Scrip dividends** are generally taxable when received. In some cases an option is given under which stockholders may receive stock at maturity; if such option is exercised, the scrip dividends should be treated as stock dividends. If property of a corporation is sold to stockholders for less than its fair value, the Treasury holds that the difference constitutes a dividend to such stockholders.

Income from Partnerships and Fiduciaries

DATA REQUIRED FOR TAX RETURN.—In the returns for individuals, provision is made for returning income from partnerships and from fiduciaries. Due to the fact that the income from such sources may have to be divided into several classes, the total income will not be placed on the line apparently provided therefor. Before an individual who receives income from a partnership, or from an estate or trust, prepares his tax return, he must secure from the partnership or fiduciary, the amounts of the following items respectively:

1. Dividends of domestic corporations free from normal tax.
2. Principal of and taxable interest on United States obligations.
3. Principal of and interest on tax-exempt securities.
4. Capital net gain or loss.
5. Earned income from partnership.
6. Donations not deducted by partnership.
7. Foreign income and excess profits taxes.
8. Interest on bonds having tax-free covenant.

The individual will return these items together with any similar items received or paid personally. The balance of the income from the partnership, estate or trust will be returned under the caption appropriated thereto.

PERIOD IN WHICH INCOME RETURNED.—The determination of the income to be returned as from a partnership or fiduciary is usually not difficult. However, the regulations regarding the period in which such income is taxable cause considerable complication in some cases. If the **taxable years** of the individual taxpayer and of the partnership or fiduciary are the same, no difficulty arises, since the individual takes up the income from the partnership or fiduciary in his return for the same year, independent of whether he is on the cash or accrual basis.

However, if the fiscal years of the individual and the partnership or fiduciary are not the same, the individual will include in his return the income from the partnership or fiduciary for its fiscal year ended within the individual taxpayer's fiscal year. Thus, if the individual's fiscal year ends on August 31 and that of the partnership or fiduciary ends on November 30, the individual will include the income from the partnership or fiduciary for its year ended November 30, 1925 in his return for the year ended August 31, 1926. If the tax rates for the two calendar years entering into the fiscal year change or if the computation of income or allowance of deductions changes, the computation of the individual's tax liability becomes very involved. The subject is briefly treated hereinafter (see Rates and Computation of Tax, page 1612).

In order to minimize the difficulties, it is recommended that the taxable years of partnerships and the members thereof be made to coincide. The

fiscal years of fiduciaries are more difficult of adaptation, unless the same basis is chosen by all parties.

Income from Rents and Royalties

PAYMENTS BY LESSEES OF TAXES, ETC.—Rent received or accrued, whether received in cash or other property, is taxable. The **chief problem** is found in connection with the income arising from improvements or payments made by lessees on behalf of lessors. Taxes paid by a lessee to or for a lessor constitute income to the lessor. Similarly, if the tenant is required to pay for repairs, such amounts are income to the lessor. The lessor may deduct such payments made on his behalf if such amounts would have been deductible had he paid them direct. When property of a corporation is leased under a contract whereby the lessee pays a rental equal to the interest or dividend, respectively, on securities such payment constitutes income to the lessor, even if the payments are made direct to the obligees or shareholders, respectively.

PERMANENT IMPROVEMENTS BY LESSEES.—Since the **title to permanent improvements** made by a lessee usually vests in the lessor as soon as made, income to the lessor may arise therefrom. The Treasury permits this income to be reported in one of two ways:

1. The lessor may report as income at the time of completion of the improvements, the fair market value thereof subject to the lease. Ordinarily this amount will be the difference between the value of the land free from the lease and without the improvements and the value of the land subject to the lease but with the improvements.
2. The lessor may spread over the life of the lease the estimated depreciated value of the improvements at the termination of the lease, reporting as income for each year an aliquot part thereof.

Provision is made for adjustments if the lease is prematurely terminated.

ROYALTIES.—Royalties received or accrued constitute taxable income. Since they are usually provided for by contract, the question of when they become payable is decided by the interpretation of the contract. In case of dispute as to title, the royalties **follow the property** and constitute income to the true owner. Royalties from mines, oil wells and other natural resources are **subject to depletion charges.** This is true even in the case of advanced royalties. The subject of depletion is discussed hereinafter under Deductions for Depletion.

Deductions from Gross Income

WHEN DEDUCTIONS SHOULD BE MADE.—Just as each year's return should contain all the income items for that period, so all authorized deductions applicable to the taxable year must be deducted in the return for that year. Expenses or liabilities of one year cannot be used to reduce the income of a subsequent year, except in so far as a statutory net loss may be carried forward and so applied. If a taxpayer neglects to deduct in his return the expenses, losses, taxes, interest, etc., applicable thereto, he may lose the benefit thereof entirely, unless he corrects his error within the statutory period for filing refund claims. (See Claims for Refund.)

Authorized allowances may be deducted under the cash or accrual method.

Under the "cash" method, the deductions will be taken when the relevant items are paid; under the accrual system, when the liability is incurred or under good accounting practice should be set up. Provision is, however, made for the allowance of deductions in periods other than those in which sustained, when such procedure would more correctly reflect the true income.

DEDUCTIONS NOT PERMITTED.—Deductions may not be made for—

1. Personal living or family expenses.
2. Amounts paid for permanent improvements or betterments made to increase the value of property.
3. Amounts expended to restore property or to make good depreciation, etc., for which an allowance is or has been made.
4. Premiums paid on insurance covering the life of an officer or employee, or anyone financially interested in the taxpayer's business when the taxpayer is directly or indirectly a beneficiary.
5. Shrinkage in value of a life estate nor deductions from income of life estates not allowed by states, territories or District of Columbia.

PERSONAL AND FAMILY EXPENSES.—The personal or ordinary living expenses of taxpayers may not be deducted. As examples of so-called personal expenses, there may be cited life insurance premiums, fire, etc., insurance on a taxpayer's house, allowances made by a father for the services of unemancipated minor children, commutation fares, expenses of upkeep of automobiles used for pleasure, wages of domestic help, and tuition fees. The Treasury holds that the cost of uniforms of nurses, railway trainmen, barbers, surgeons and baseball players are personal expenses and so not deductible.

CAPITAL EXPENDITURES.—The cost of permanent improvements or betterments which increase the value of property cannot be deducted. Although some expenditures do not "increase the value of property," yet the Treasury does not permit their deduction. Alterations to adapt a building to a taxpayer's use, and changes in water and sewer pipes, are examples in this class. Among non-deductible expenditures the Treasury has placed the cost of defending or perfecting title to property, architects' fees, stock selling commissions, expenses of administration of an estate, voluntary assessments of stockholders, organization fees of a corporation (taxes paid in connection therewith may be deducted), dividends of a subsidiary guaranteed by a holding company, stock exchange listing fees, cost of installing machinery, and resurveying property.

PREMIUMS ON BUSINESS INSURANCE.—Where a taxpayer is directly or indirectly a beneficiary under an insurance policy taken out on the life of an officer, employee or one financially interested in his or its business, the premiums on such insurance may not be deducted. The increased efficiency of employees as a result of insurance alone is not considered to bar the deduction of premiums. If life insurance is taken out on the life of the lender in order to procure a loan, the proceeds to be applied in satisfaction of the loan, the premiums may not be deducted.

EXPENDITURES TO MAKE GOOD DEPRECIATION, ETC.—As taxpayers are allowed deductions for depreciation, obsolescence, etc., amounts expended to make good such depreciation, etc., must be charged against reserves set up to cover such allowances and may not be deducted from gross income.

Deductions for Interest

Corporations and individuals may deduct all interest paid or accrued during the taxable year, except interest on indebtedness incurred to purchase or carry securi

ties the interest from which is wholly exempt from tax. Thus interest paid to purchase or carry state or municipal securities may not be deducted. As to United States obligations, the only securities which are wholly tax-exempt are the pre-war issues and the 3½% Liberty bonds. Thus the interest on loans to purchase or carry any Liberty bonds (other than the 3½'s) or Treasury certificates or notes may be deducted. These rules apply also to loans where wholly exempt securities are used as collateral, so that such securities should not be used unless it is unavoidable.

Examples of deductible interest sometimes overlooked are interest on mortgages (even if on the taxpayer's personal residence), on scrip dividends, on certificates of deposit, on overdue federal taxes and on local assessments the payment of which is deferred. When bonds are issued at a discount, cash discount is to be amortized over the life of the bonds and deducted as additional interest paid. As instances of non-deductible interest may be noted: Interest on taxpayer's own capital for cost keeping purposes, interest on partners' capital, and so-called interest on preferred stock (really dividends).

Deductions for Taxes

Taxpayers may deduct taxes paid or accrued during the taxable year with the exception of those falling in the following five classes:

1. Income, war-profits and excess-profits taxes imposed by the authority of the United States.
2. That part of foreign income, war-profits and excess-profits taxes as is allowed as a credit (see Credits).
3. Local benefit taxes which tend to increase the value of property against which assessed.
4. Taxes imposed upon an individual taxpayer's interest as shareholder of a corporation, paid by the corporation without reimbursement from the taxpayer. Such taxes are deductible by the paying corporation.
5. 2% tax paid by obligor under tax-free covenant in a bond.

With the exceptions above noted, all taxes are deductible by the taxpayer against whom they are assessed. A husband cannot deduct in his individual return taxes paid by his wife. The deduction may be made in a joint return. Similarly manufacturers' taxes (e.g., on automobiles) cannot be deducted by the purchaser at retail.

FEDERAL ESTATE AND STATE INHERITANCE TAXES.—Federal estate taxes paid or accrued during the taxable year may be deducted from the gross income of the estate. Federal estate taxes accrue one year after the decedent's death. If the estate is **on a cash basis** the tax is deductible when paid; if **on the accrual basis,** when accrued or when paid (if before the accrual date).

States impose inheritance taxes of two classes: (1) those imposed on the right to transmit property, as in Pennsylvania and Utah, and (2) those imposed on the right to receive property, as imposed by other states and territories. Rhode Island imposes taxes of both classes. Inheritance taxes in class 1 may be deducted by the **estate,** those in class 2 by the individual **beneficiaries** from their gross income. This arrangement applies even if the will provides for some other method of payment of the taxes imposed. However, if the laws of the particular jurisdiction impose the taxes on specific beneficiaries, then such beneficiaries alone can take the deduction.

LOCAL BENEFIT TAXES.—**Assessments,** often called taxes, paid for local benefits, such as streets, sewers, sidewalks, etc., imposed because of benefit to certain specific property against which assessed, cannot be deducted. Taxes for general benefits assessed on all property in a certain location are deductible. Assessments for maintenance or repair of local benefits are deductible if a necessary business expense. The fundamental principle is whether the special assessment tends to increase the value of the property against which assessed. Where value is increased, the assessments must be capitalized and not deducted.

OTHER DEDUCTIBLE TAXES.—Included among deductible taxes are import or tariff duties, stamp taxes, automobile and other license fees, gift taxes, federal capital stock tax, state franchise taxes, state income taxes, foreign taxes (except that part allowed as a "credit") and all property taxes (except those for local benefits which increase the value of the property).

Customs duties may be deducted even though paid upon jewelry, clothing and other personal items.

NON-DEDUCTIBLE TAXES.—Among taxes which may not be deducted are federal income tax, delinquent taxes paid by mortgagee, 2% federal income tax paid by obligors under tax-free covenants (but state taxes assumed may be deducted), taxes on bank stock (non-deductible by shareholders, but deductible by bank), and that part of foreign income and profits taxes allowed as a "credit."

Deductions for Losses

GENERAL.—**Individuals** may deduct losses sustained during the taxable year and not compensated for by insurance, etc., which fall within the following classes:

1. Losses incurred in the taxpayer's business.
2. Losses incurred in transactions entered into for profit.
3. Losses arising from fires, storms, shipwrecks or other casualties, or from theft.

Corporations may deduct all losses incurred, if not compensated therefor by insurance or otherwise. An exception is made for both individuals and corporations whereby losses arising from "wash sales" as described hereinafter are not allowed as deductions. Losses, to be deductible, must usually be evidenced by **closed or completed transactions.** Where books are kept, losses are usually charged off thereon and this action may be evidence that the taxpayer considered the transaction as completed at that time.

The basis to be used in computing losses is the same as would have been used in the case of a profit, generally the cost of the property, or March 1, 1913, value thereof, whichever is higher. The determination of the basis has been considered under Income from Sales. Adjustment has to be made in the basis, for capital expenditures on the property and for depreciation, depletion, amortization and obsolescence to the extent allowed in previous tax returns. Losses on the sale of **capital assets,** as defined in the statute, must be segregated from other losses, since such losses may require a special computation of tax liability. (See Rates and Computation of Tax, page 1614.) The year in which the loss occurs usually determines the period in which the deduction is to be made, independent of the time when the amount of the loss is actually determined.

WASH SALES.—When a taxpayer (other than a dealer in securities) sells securities at a loss, but **within 30 days** before or after the sale, has acquired, or has entered into a contract or option to acquire substantially identical property,

such loss cannot be deducted. The "substantially identical property" is considered to take the place of the property sold and will be so treated in computing gain or loss on subsequent sale. The acquisition within the 30-day period of similar property by gift or bequest does not act to bar the deduction of the loss. If the acquisition within the 30-day period is to the extent of only part of the property sold, the corresponding part of the loss will be disallowed. The "wash sale" provision applies only to losses; gains under similar conditions have to be reported.

LOSSES FROM FIRES, CASUALTIES, ETC.—The deductibility of losses from fires, storms, shipwreck or from theft is not usually difficult of determination. In the case of losses from **theft,** it is necessary to be able to prove that the property in question was actually stolen and not merely "lost" or mislaid. The Treasury restricts somewhat narrowly the deduction of losses from "other casualty." Thus, losses have been denied which resulted from a bomb explosion, accidents due to the icy condition of pavements, collision of a pleasure car. Damage resulting to a taxpayer's residence as a result of the bursting of frozen water pipes was held deductible.

LOSS OF USEFUL VALUE.—Changes in business conditions, the abandonment of manufacture of a certain product, inventions permitting greater production or which reduce the cost of manufacture, often cause the premature discarding of buildings, machinery, etc. In such cases a loss may be deductible if the abandonment is permanent. The unforeseen cause must be established to the satisfaction of the Treasury. If the abandonment can be definitely foreseen, an allowance for obsolescence should be claimed as part of the depreciation allowance.

NON-DEDUCTIBLE LOSSES.—The Treasury has disallowed the deduction of losses of the following classes: Sale of capital stock at a discount; shrinkage in value of securities; Imperial Russian 5½% bonds of 1916 and 6½% bonds of 1919; assessments paid by stockholders in reorganization, etc.; sale of individual's residence (unless purchased to be resold at a profit); sale of Treasury stock by corporation; premium paid on redemption of capital stock.

The **demolition of buildings,** etc., may result in a loss, but if a taxpayer buys real estate upon which buildings are located which are then demolished with a view to erecting a new building, no deductible loss arises from such demolition. When **bonds** are issued at a discount, such discount cannot be deducted immediately as a loss, but must be prorated over the life of the bonds, a proportionate part only of the total being deducted each year.

Deductions for Net Losses

METHOD OF DEDUCTION.—No place on any form is specified for deducting statutory net losses. For convenience, such net losses may be deducted on the line provided for losses, a schedule explaining the computation of the net loss being attached to the return. Any taxpayer having a statutory net loss (explained below) may carry such net loss forward to the succeeding year (the "second" year) and deduct it from his ordinary net income and capital net gain for the "second" year, applying the balance against net income and capital net gain for the next succeeding year (the "third" year). It will be noted that capital net losses are excluded from consideration in the "second" and "third" years.

NET LOSS DEFINED.—The term "net loss" means the excess of allowable deductions over gross income plus—

1. The excess of deductions not attributed to trade or business over gross income not arising from trade or business.
2. The excess of capital losses over capital gains.
3. The excess of depletion based on discovery value over that based on cost.
4. Deductible dividends (corporations only).
5. The excess of tax-free interest over interest paid or accrued in purchasing or carrying wholly tax-exempt securities.

COMPUTATION OF NET LOSS.—The definition above can be better understood by considering the following official example from the regulations:

A, an individual conducting a trade or business, finds the following facts relating to 1924:

(a) His deductions as computed under section 214 amount to $100,000.

(b) Included in the deductions is an item of $10,000 for loss by fire of property occupied by him as a residence and not used in connection with his trade or business.

(c) Other deductions otherwise allowed under section 214 on account of transactions entered into for profit outside of his trade or business are $3,000.

(d) His taxable gains from transactions entered into for profit and not connected with his trade or business are $5,000.

(e) Donations to the Red Cross of $1,000 are included among the deductions.

(f) Depletion is claimed in the amount of $2,000, of which $500 is based upon the value of the mineral in the mine as of March 1, 1913, and $1,500 is attributable to increase in valuation on account of discovery subsequent to February 28, 1913.

(g) His entire gross income as computed under section 213 is $50,000.

(h) Interest received from municipal bonds exempted from taxation by section 213 (b-4) amounted to $10,000.

(i) Interest was paid upon money borrowed to carry municipal bonds in the amount of $8,000, which amount is not deductible under section 214 (a-2):

Total deductions (a)			$100,000
Deduct:			
Loss by fire (b)	$10,000		
Other deductions (c)	3,000		
Total deductions outside business	13,000		
Less: Gain outside business (d)	5,000		
Excess of deductions not sustained in trade or business over taxable gains or profits not derived from such trade or business	8,000		
Donations (e)	1,000		
Depletion on basis of value after discovery (f)	$2,000		
Less: Portion based on value as of March 1, 1913	500		
Portion of depletion representing discovery value in excess of cost or value as of March 1, 1913	1,500		
Total exclusion from deductions			10,500
Total expenses directly attributable to the conduct of the trade or business			89,500
Gross income (g)		50,000	
Add: Non-taxable interest received (h)	$10,000		
Less: Interest paid on money borrowed to carry municipal bonds (i)	8,000	2,000	52,000
Statutory net loss			$ 37,500

If A has an ordinary net income in 1925 of $25,000, and sustains a capital net loss of $10,000, he will pay no tax for 1925, since he had a net loss in 1924 of $37,500, and will carry over $12,500 as deduction for computing net income in 1926. If A in 1926 has ordinary net income of $10,000 and a capital net gain of $50,000, he may, at his option, pay a tax of 12½% upon $47,500.

APPLICATION OF NET LOSS.—A taxpayer sustaining a net loss as above computed may deduct such net loss from his ordinary net income of the succeeding year, any excess being similarly applied against the ordinary net income of the next succeeding year. If such taxpayer has a capital net gain for the "second" year, any excess of the net loss over the ordinary net income of that year may be applied in reduction of the capital net gain, the excess, if any, being similarly carried forward for application in the "third" year. If the taxpayer has a capital net loss for the "second" year or "third" year such capital net loss is ignored in applying the statutory net loss. In no case does the net loss of one year increase the net loss of a succeeding year.

The net loss provisions are applicable to the **members of partnerships and to estates and trusts** (not to the beneficiaries thereof).

Deductions for Bad Debts

TWO METHODS OF DEDUCTION.—A deduction for debts ascertained to be worthless in whole or in part is permitted. If the taxpayer is on the accrual basis, one of two methods may be used—(1) charge off bad debts when ascertained to be worthless in whole or in part, or (2) deduct a reasonable addition to a reserve for bad debts. If the latter method is being used, the actual debts ascertained to be worthless will be charged against the reserve for bad debts and will not be deducted from gross income. Taxpayers on the accrual basis were, in 1921, given an option as to the method used for their 1921 returns. The method selected for that year is binding for all years thereafter unless permission to change the method has been granted by the Commissioner. Taxpayers commencing business after 1921 may in their first accounting period establish the basis to be used by them thereafter.

RESERVES FOR BAD DEBTS.—Generally speaking, this method should be used by taxpayers on the accrual basis. The reserve method, however, cannot be used for one specific debt. Taxpayers adopting the reserve method may deduct from gross income each year a reasonable addition to such reserve. What constitutes a reasonable addition is a matter of judgment to be determined by each taxpayer in the light of all available data provided by his own business and by business conditions in general. The corporate return requires a statement of charge sales, etc., for the 5 years immediately preceding and for the amount of bad debts in each year of these years. Under similar business conditions, these data would enable the taxpayer to establish a percentage of gross charge sales to be set up as a reserve for bad debts. Changing conditions will require adaptation of this data to existing circumstances.

A reserve set up on sales is generally preferable to one based on outstanding accounts and notes receivable at the end of the year. However, there is no inhibition against the use of the latter method. Debts ascertained during the year to be worthless in whole or in part will be charged against the reserve. If such debts arose after the taxpayer commenced the use of the reserve method for tax purposes, such debts may not be deducted from gross income since the addition to the reserve is allowed as an annual equalizing deduction in respect of such debts. If the debts arose before the taxpayer began to use the reserve

method, such debts will be deductible since no addition to the reserve has been allowed in respect thereof.

CHANGE OF METHOD.—When a taxpayer desires to change from the deduction of actual debts method to the reserve method, application must be made to the Commissioner before the end of the taxable year. If permission is granted, the taxpayer must set up as of the beginning of the year of change a reserve which will adequately take care of accounts then outstanding. The amount of this reserve cannot be deducted from gross income. For the year of change and thereafter a reasonable addition to this reserve is an allowable deduction. In addition there may be deducted the amount of any debts which arose prior to the year of change which are ascertained to be worthless in whole or in part. The modification of this procedure required when a change from the reserve to the actual debt method is authorized should be obvious.

TESTS OF WORTHLESSNESS.—Consideration has to be given to the types of bad debts recognized by the Treasury and also to the time at which such debts are determined to be worthless. With the exception of claims arising or income accruing prior to March 1, 1913, no allowance for a bad debt can be made unless the income arising therefrom has previously been reported. Thus a taxpayer reporting on the cash basis cannot deduct an account ascertained to be worthless, since such account has not, on the cash basis, been previously returned as income. Loans, the forgiveness of which is tantamount to a gift cannot be deducted as bad debts. The actual relation of debtor and creditor must exist.

When the surrounding circumstances indicate that a debt is worthless and uncollectible, either in whole or in part and that legal action to enforce the debt is not likely to result in satisfactory execution on a judgment, or if such proceeding would cost more than is likely to be collected, then the debt is considered worthless, in whole or in part, as the case may be. Bankruptcy is generally an indication of worthlessness of debts in whole or in part. In the case of insolvency, it is necessary to ascertain what is likely to be received in final settlement; the balance may usually be charged off as a debt worthless in part. When mortgaged or pledged property is sold on foreclosure, etc., for less than the debt, the balance may be charged off by the mortgagee or pledgee if ascertained to be uncollectible.

Bonds and other securities actually ascertained to be worthless may be charged off. Mere market fluctuations do not warrant such action. Banks or other corporations under federal (or equivalent state) supervision may generally consider as worthless for tax purposes, debts which they are required to charge off by the supervisory authority. If books are kept, bad debts must be charged off when ascertained to be worthless. The actual charging off may or may not be evidence of worthlessness.

RECOVERIES.—Recoveries on account of debts previously charged off as worthless and deducted for tax purposes must be reported as income when received.

Deduction for Dividends

This deduction **applies only to corporations.** They may deduct from gross income the following classes of dividends:

1. From domestic corporations (except those organized under China Trade Act, 1922, and those whose income arises chiefly in a possession of the United States).
2. From those foreign corporations which derived over 50% of their gross income for the preceding 3 years from sources in the United States.

As applied to ordinary corporate taxpayers, the law allows the deduction of dividends received from practically all domestic corporations but only from a small minority of foreign corporations. The corporate deduction is upon the same basis as the individual credit (see Credits).

Deductions for Contributions

APPLICATION AND LIMITS.—The statutory deduction **applies only to individuals.** Corporations may deduct contributions, donations, etc., when it can be shown that such are necessary business expenses. In such cases, they should be deducted under "Other deductions" and not as "Contributions." Individuals may deduct contributions to the objects specified below to an aggregate amount not exceeding 15% of their net income computed without this deduction. A special exception was made in the 1924 law for those who were devoting almost their entire income to charities, whereby the whole amount of such contributions could be deducted under certain very special conditions. This exception does not interest the ordinary taxpayer and is consequently not discussed herein. Estates and trusts may deduct in full amounts paid or set aside in accordance with the wills or deeds of trust for the subjects enumerated below.

DEDUCTIBLE CONTRIBUTIONS.—Contributions falling in the following classes are deductible:

1. For the use of the United States, any state, territory or political subdivision thereof or the District of Columbia, for exclusively public purposes.
2. To any corporation, trust, community chest or foundation organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes or for the prevention of cruelty to children or animals, if no part of the net earnings inures to the benefit of any private shareholder or individual.
3. To the special fund for vocational rehabilitation.
4. To posts or organizations of war veterans or auxiliaries thereof, if organized in the United States or its possessions, and if no part of the net earnings inures to any private shareholder or individual.
5. To any fraternal society, order or organization operating under the lodge system, if contributions are used exclusively for religious, charitable, scientific, literary or educational purposes, or for the prevention of cruelty to children or animals.

Non-resident aliens may only deduct contributions to organizations incorporated or created in this country.

Examples of Deductible Contributions.—The following contributions have been held deductible by individuals: contributions or donations to a state university; to a G. A. R. post; organization giving educational musical concerts; Woodrow Wilson Foundation; Harding Memorial Association; Palestine Foundation Fund; Y.M.C.A.; Red Cross; pew rents and dues paid to churches.

Examples of Non-Deductible Contributions.—The Treasury has disallowed contributions to the following: National Dry Federation; Knights of Columbus; public high school for athletic purposes; volunteer fire companies; expenses of delegate to church conference.

REPORTING AND VALUING GIFTS.—When a deduction for contributions is claimed, a statement must be made on or accompanying the return giving the name and address of each organization to which contributions were made,

the amount and the approximate date. When the gift is other than money, the fair market value of the property at the time of gift is deductible. The greatest benefit is therefore obtained by the donation of property which has appreciated in value since acquisition by the donor, since the donor pays no tax on the appreciation and may deduct the full value.

DONATIONS AS BUSINESS EXPENSES.—As hereinbefore stated, corporations may not deduct donations as such, but only when the contributions are in the nature of ordinary and necessary business expenses. If a benefit flows directly to the corporation, donations are deductible. Similarly donations to charitable institutions, hospitals or educational institutions for the benefit of its employees or dependents may be deducted by a corporation. In such cases the donation is a true business expense and deductible as such. Money expended for campaign expenses is not deductible.

PARTNERSHIPS.—No deduction for contributions may be made in the partnership return. However, the individual members may deduct, subject to the 15% limitation, their pro rata share of partnership contributions in their individual returns.

Deductions for Depreciation

DEPRECIATION DEFINED.—The law permits the deduction of a reasonable allowance for the exhaustion, wear and tear of property used in the taxpayer's trade or business, including a reasonable allowance for obsolescence. This deduction is allowed to taxpayers whether on the cash or accrual basis. It cannot be deducted on property, such as a residence, for personal use. Although the law uses the phrase "exhaustion, wear and tear," the usual term applied is "depreciation." The Treasury has defined this word thus: "Depreciation means the gradual reduction in the value of property due to physical deterioration, exhaustion, wear and tear through use in trade or business."

The word "use" in this definition must be interpreted broadly, since depreciation accrues and is deductible even when the property is not in active use, or even if there is no net profit from which to deduct it.

The object of the depreciation allowance is to permit a taxpayer to obtain the return of capital or basis (see below) by the time the property has become worn out. Since an allowance is made annually throughout the estimated useful life of the property, amounts expended in making good the wear and tear cannot also be deducted.

BASIS FOR COMPUTATION.—The asset value upon which depreciation is computed is the same as the basis which would be used in the case of sale of the property. In the case of property acquired after February 28, 1913, the basis is generally cost; for property acquired before that date, the basis is cost or March 1, 1913 value, whichever is higher. To this general rule there are **many exceptions** which have been enumerated under "Income from Sales and Exchanges." Reference thereto should be made to ascertain the basis to be used in particular cases, such as property acquired in a reorganization, by gift, bequest, etc. From the basis as above determined, there must be deducted the estimated **salvage value** of the property at the time it is likely to be discarded. The remaining amount is then distributed over the estimated useful life of the property on some method acceptable to the Treasury.

METHODS OF DETERMINING ALLOWANCE.—Although accountants recognize a number of methods upon which the total depreciation may be distributed over the life of the asset, the Treasury has only recognized, specifi-

cally, **two methods.** This fact should not prevent the deduction of depreciation on some other basis if such method accords with recognized trade practice or if sanctioned by good accounting practice. The method in common use is the **"straight line"** method under which scheme the total depreciation is spread equally over the life of the asset. Thus, if a machine costs $1,200, and is estimated to have a scrap value of $200 and a useful life of ten years, the annual deduction will be one-tenth of $1,000 ($1,200 − $200). The **diminishing balance** method does not find favor with the Treasury. Another method sanctioned by the Treasury is the **apportionment of the total depreciation over units of production.** If the machine referred to in the previous paragraph is believed to be capable of producing 100,000 units of the particular product, there will be deducted in any year the product of the number of units actually manufactured times the fraction $\frac{1.000}{100,000}$. A production in a particular year of 25,000 units will therefore warrant a deduction of $250 in that year. When the total deductions equal the total depreciation previously estimated, no further deductions may be made.

COMPOSITE RATES OF DEPRECIATION.—While some taxpayers maintain records which permit them to compute depreciation for each type of capital asset employed, it is usually **necessary to apply depreciation on general classifications,** such as buildings, machinery, automobiles, etc. This method is not scientifically accurate, but is usually the best solution of the problem. The rate to be applied to each such class of assets will be a composite rate which will not apply to any specific asset, but to the class as a whole. Thus a depreciation rate for machinery of 5, 7½ or 10% might be applied in a particular case, although in that case, a specific machine might have a life of 40 years, while another would be discarded after 5 years.

RATES OF DEPRECIATION.—No categorial statement of depreciation rates can be given which would apply to all cases. Depreciation is essentially **an individual problem.** All relevant factors must be considered. Climate, types of labor, adequacy of repairs and periodical inspections, overtime and overload, type of product, contamination of atmosphere by chemicals, etc., road conditions for trucks, etc.—are all factors to be taken into account. Most industries have rates of depreciation which have been arrived at by trade associations or supervisory commissions. A tabulation of many such rates appears in Montgomery's "Income Tax Procedure," in the "Accountants' Index," in publications of the National Association of Cost Accountants, in various uniform cost systems, and in trade papers. These rates should be given careful study. **Patents and copyrights** should be depreciated over their life unless they become obsolete before expiration when the undepreciated balance may then be charged off. A taxpayer has the option of charging off as an expense when incurred the cost of drawings and patterns or of capitalizing and depreciating such costs.

PROPERTY NOT SUBJECT TO DEPRECIATION ALLOWANCE.—No deduction may be made for the depreciation of land nor of property used as or in connection with a personal residence. The potential earning capacity of an individual is not the subject of a depreciation allowance. The Treasury holds that the roadway of a railroad may not be depreciated. When an aggregate of depreciable and non-depreciable property is acquired (e.g., land and buildings) an allocation must be made so that depreciation is computed only on depreciable assets.

OBSOLESCENCE.—There should be included in the depreciation rate an allowance for any obsolescence which is likely to take place due to changes in the methods of production, new inventions, changes in business localities, etc.

GENERAL.—Depreciable assets do not usually remain fixed in amount throughout the year. If the changes are small in amount, an average of the balances at the beginning and end of the year should be used as a basis for computation of the allowance. If major additions are made, depreciation thereon should be computed from the date of acquisition. To be deductible, depreciation **must be charged off on the books of taxpayers.** An exception is allowed where an individual owns one or two pieces of depreciable property but does not keep books. The depreciation allowed in such a case is "charged off" on the tax return. The allowances must be either deducted from the book value of the assets, or preferably credited to a depreciation reserve to which all renewals and replacements will be charged.

Deductions for Depletion

In order to permit a taxpayer to recover his capital, an allowance is permitted which takes account of the loss of value of natural resources, such as mines, oil wells and timberlands resulting from the removal of the product in question.

BASIS OF COMPUTATION.—With the exception of depletion based upon so-called discovery value, the basis used in computing depletion is the **same as would be used in the sale of the property.** In the case of property acquired after February 28, 1913, this will often be the cost of the property; when acquired before that date, the basis will usually be the cost or March 1, 1913 value, whichever is higher. Other bases are outlined hereinbefore under Income from Sales and Exchanges.

DISCOVERY VALUE.—If as a result of the **discovery of new deposits,** etc., after February 28, 1913, the fair market value of a mine or well becomes seriously disproportionate to the cost, the value of the discovered property based on what is evident within 30 days of the discovery may be used as the basis of depletion. The deposit so discovered must not have been known previously or its existence must have been extremely improbable. The depletion allowance when based upon discovery value may not exceed 50% of the net income (computed without allowance for depletion), except that in no case may the depletion allowance be less than if computed without reference to discovery value.

COMPUTATION OF DEPLETION ALLOWANCE.—To determine the depletion allowance for any year, it is necessary to know (a) the "basis" or basic valuation, (b) the mineral content at the basic date, and (c) the production for the taxable year. The depletion allowance is then $\frac{a}{b} \times c$.

VALUATION.—The major problem in the determination of depletion allowances is the ascertainment of the value and content of the particular mine, well or timberland at the basic date. **Determination of the content** is essentially an engineering problem. As to valuation, the methods employed by the Treasury do not in all cases coincide with those employed by reputable authorities in the particular industry. If possible the Treasury likes to use **actual sales of comparable property.** If, as is usually the case in mines and oil wells, such a method is not feasible, **analytic methods** are employed. The subject is too complicated for discussion here, but it may be said that the method contemplates the determination as of a basic date of the present value of esti-

mated future earnings, due allowance being made for necessary development of the mineral body.

GENERAL.—As with depreciation, allowances for depletion **must be recorded in the taxpayer's books.** This is also true of discovery value when allowed. **Appropriate reserves** will also be set up. When **property is leased,** the depletion allowance must be apportioned equitably between lessor and lessee on the basis of their interests in the property. **Royalties** based on natural resources are subject to an allowance for depletion at the time when received by the true owner. In computing the depletion allowance, the value of surface land must be excluded. Very often this is of comparatively little value. **Very elaborate questionnaires** have to be filed by taxpayers claiming depletion allowances. Copies may be obtained from the Commissioner in Washington.

Other Deductions

Under this heading will be considered a number of deductions, chiefly **business expenses,** not heretofore treated. The law permits the deduction of all ordinary and necessary expenses paid or incurred during the year, including a reasonable allowance for salaries, etc.

SALARIES, WAGES, ETC.—Amounts paid as compensation for personal services may be deducted. However, if compensation is not in fact the purchase price of services, it cannot be deducted. Ostensible salaries, which are in fact distributions of profits, may not be deducted. If such salaries are in proportion to stock holdings, the disallowed part is treated as a dividend paid. Salaries paid must be reasonable; if unreasonable in amount, the inference is that a distribution of profits is contemplated. Bonuses paid to employees are deductible, as are commissions paid salesmen, etc. Christmas gifts may be deducted; also pensions to ex-employees and their dependents. Educational and welfare expenditures are usually a proper deduction. It is not necessary that salaries or other compensation be paid in cash. If employees are given stock or other property as compensation for their services, the fair market value of the stock or other property is deductible as an expense. **Partners' salaries** are in fact distributions of profits. As such, they are not true deductions and should not be shown as such on the partnership return. Any amount designated as salary in a partnership return must of course be included as income by the individual recipient.

INSURANCE.—An individual cannot deduct premiums paid on an insurance policy covering his own life. Corporations and individuals in business may deduct insurance premiums covering fire, theft, storm, accident, employes' liability, credit risk, marine losses, fidelity bonds, also group insurance on the lives of its employees, but the deduction of premiums on the life of an officer or employee where the taxpayer is a beneficiary is not permitted. **Additions to "self-insurance" reserves** may not be deducted. The charges to such reserves are deductible when the liability is incurred. An **award under a workmen's compensation** act is deductible in full when determined, unless covered by insurance.

RENTALS.—Rentals paid in business operations are deductible, whether paid in cash or otherwise. Any payments made under a lease, additional to the rental, are deductible either when made or spread over the life of the lease, depending on the character of the payment. If a lessee erects a building on leased land, the cost thereof will be written off over the life of the lease or of the building whichever is shorter. A similar procedure is adopted for spreading

the cost of improvements over the life of a lease. When a lease is acquired for a specified sum, the cost is to be apportioned over the period of the lease. Taxes paid by a tenant or repairs made by a lessee are deductible if no reimbursement is made by the lessor.

TRAVELING EXPENSES.—A deduction is allowed for traveling expenses (including the entire amount spent for meals and lodging) while an individual is away from home **on trade or business.** Corporations may deduct traveling expenses paid to their employees. Commuters' fares are not deductible. The term "home" is interpreted to include a place of residence in the vicinity of the taxpayer's place of business.

MISCELLANEOUS.—The cost of **upkeep of an automobile** is deductible to the extent which it can be proven to have been used for business. Amounts set up in a **reserve for discounts** may be deducted, any discounts not taken being subsequently returned as income. **Dues paid to chambers of commerce,** etc., are deductible, as are dues to professional societies. **Legal expenses in connection with business** may be deducted unless the Treasury considers that any part thereof falls within the category of lobbying expenses. An individual cannot deduct attorney's fees paid for his defense against a criminal action brought against him as a corporate officer.

Personal Exemptions and Credits

In computing the normal tax for individuals, certain credits and personal exemptions are allowed. Certain credits are allowed to estates and trusts and to corporations.

PERSONAL EXEMPTIONS.—In computing the normal tax for individuals, the personal exemptions are as follows:

Single person	$1,000
Head of a family or married person living with husband or wife	2,500
Estates and trusts	1,000

The personal exemption for a husband and wife living together is $2,500. If they make separate returns the personal exemption may be taken by either or divided between them. The question of whether the personal exemption should be taken by husband or wife or be divided between them, is determined by using the method resulting in the payment of the least combined normal tax. If husband and wife are living apart voluntarily, the $2,500 exemption does not apply, each being treated as a single person.

Head of a Family.—A head of a family is an individual who actually supports and maintains in one household, one or more individuals who are closely connected with him by blood relationship, relationship by marriage, or by adoption, and where the right to exercise family control and provide for these dependent individuals is based upon some moral or legal obligation. If without necessity the dependent makes his or her home elsewhere than with his or her benefactor, the latter is not a head of a family. Thus, a son who supports his widowed mother is a head of a family. But a resident alien whose family is abroad cannot claim the personal exemption of a head of a family.

Change of Status During Year.—If the status of an individual taxpayer changes during the year, the personal exemption is adjusted accordingly. Thus assume a single man marries on August 1. His exemption will be 7/12 of $1,000 plus 5/12 of $2,500, or a total of $1,625. Fractional parts of months less than one-half are disregarded. The total personal exemption taken during a year

by a man and woman who are married for more than one month during that year cannot exceed $2,500.

Return for Fractional Part of Year.—When returns for a period less than a full year are made (except as the result of a voluntary change of fiscal years by taxpayers) the personal exemptions are correspondingly reduced. However, if an individual dies during the year, the full exemption based on his status on the date of death will be allowed in the return filed for such decedent, although such return covers only part of a year.

CREDIT FOR DEPENDENTS.—A credit is allowed in computing the normal tax of individuals (but not of estates, trusts or corporations) of **$400 for each person,** other than husband or wife, who is dependent upon and receiving his chief support from the taxpayer, if such dependent is either (1) under 18, or (2) incapable of self-support because mentally or physically defective. Whether an individual is entitled to this credit depends on his status on the last day of his taxable period. No adjustment is made as a result of change of status during the year. In the case of returns for less than a year (except voluntary change of fiscal year) the credit is correspondingly reduced, except in the case of a decedent whose status at the date of death determines the allowable credit for dependents.

CREDIT FOR DIVIDENDS.—Individuals are allowed, in computing normal tax, a credit for dividends of the following classes:

1. From domestic corporations (except those organized under the China Trade Act, 1922, or which obtain most of their income in a U. S. possession).
2. From foreign corporations, 50% or more of the gross income of which for the preceding 3 years arose from sources within the United States.

Thus, in general, a credit is allowed for dividends received from most domestic corporations and from a few foreign corporations. A taxpayer receiving dividends from a foreign corporation should ascertain their status under the law and report them accordingly.

CREDIT FOR INTEREST.—Since the interest on all obligations of the United States is not subject to normal tax, a credit for the purpose of computing that tax is allowed, to individual taxpayers, of all interest on United States obligations which is included in gross income because subject to the surtax. Included in this class is interest on Liberty bonds (other than 1st 3½'s) on Treasury notes, Treasury certificates of indebtedness, Treasury bonds and war savings certificates. Details will be found under Income from Interest on United States obligations.

SPECIFIC CREDIT TO CORPORATIONS.—Domestic corporations are allowed a **specific credit of $2,000** if the net income is not in excess of $25,000. If the net income is between $25,000 and $25,250, the tax payable shall not exceed the tax which would be payable were the $2,000 credit allowed plus the excess of the net income over $25,000. If the net income exceeds $25,250, no credit is allowed. The application of the credit to corporations whose net income is but little over the $25,000 is shown by the following computations:

Example 1: Corporation A with Net Income in 1924 of $25,100.

(a) The tax, without the specific credit, at 12½%		$3,137.50
(b) Net income of	$25,100.00	
Less, Credit	2,000.00	
Tax at 12½% on	$23,100.00	2,887.50
Excess of (a) over (b)		$ 250.00

As the limitation imposed by the section precludes the tax computed under (a), $3,137.50, exceeding the tax computed under (b), $2,887.50 (an excess of $250), by more than the income in excess of $25,000 ($100), the actual tax in the case of corporation A would be: $2,887.50+$100, or $2,987.50.

Example 2: Corporation B with Net Income in 1924 of $25,300.

(a) The tax, without the specific credit, at 12½%		$3,162.50
(b) Net income of	$25,300.00	
Less, Credit	2,000.00	
Tax at 12½% on	$23,300.00	2,912.50
Excess of (a) over (b)		$ 250.00

In this example the excess of (a) over (b), $250, is not more than the excess of the net income over $25,000 ($300); the actual tax, therefore, of corporation B remains as computed without the specific credit, i.e., $3,162.50. The dividing line below and above which the specific credit of $2,000 is effective or otherwise, is $25,250.

RETURNS FOR FRACTIONAL PART OF YEAR.—Corporations filing returns for a fractional part of a year and having a net income of less than $25,000 for the period are entitled to a proportionate part of the $2,000 credit even though the net income when placed on an annual basis exceeds $25,000.

CHINA TRADE ACT CORPORATIONS.—A special credit is allowed to these corporations; for its amount and computation see the relevant sections of the law.

CREDITS IN PARTNERSHIP AND FIDUCIARY RETURNS.—In order that the individual members or beneficiaries may obtain in their personal returns the benefit of credits arising from partnerships, estates and trusts, the forms provide for the reporting of dividends. As taxable interest on United States obligations is not included as income in partnership or fiduciary returns, members or beneficiaries must be advised directly of the amount of such interest received, so that credit can be taken against the normal tax in their personal returns.

CREDITS FOR EARNED INCOME AND FOR FOREIGN TAXES.—As these credits are direct deductions from the tax otherwise payable and are not deducted from income for the purpose of arriving at the taxable net income, they will be considered under Rates and Computation of Tax, below.

Rates and Computation of Tax

The rate of tax **applicable to corporations** for 1925 is 12½% of its net income less any specific credit which may be allowed. **For individuals,** there are several classes of taxes to be applied in order to compute the total income tax.

NORMAL TAX.—The normal tax is computed on net income less the personal exemption and credit for dependents and less credits for dividends and taxable interest on United States obligations. The rate is 6%, except that for citizens and residents, the first $4,000 of net income in excess of the credits and personal exemptions is taxed at 2% and the next $4,000 at 4%. The following example will make this clear:

Gross income	$500,000
Deductions	380,000
Net income	120,000

Less: Personal exemption	$ 2,500	
Credit for dependents	800	
Dividends	20,500	
Taxable interest on United States obligations	11,200	$ 35,000
Net income subject to normal tax		$ 85,000
Tax on $4.000 at 2%		$ 80
" " 4,000 " 4%		160
" " 77,000 " 6%		4,620
Total normal tax		$ 4,860

SURTAX.—The rates of surtax are applied to the net income, no allowance being made for personal exemptions, or for credits. The rates for the year 1924 are as follows, unless changed by Congress prior to March 15, 1926. For rates applicable to years subsequent to 1924, reference should be made to the current Revenue Act.

1924 Surtax Rates

Amount of net income	Rate per cent	Total surtax on each amount	Amount of net income	Rate per cent	Total surtax on each amount
A	B	C	A	B	C
$10,000	.....	.....	$ 62,000	21	$ 5,900
14,000	1	$ 40	64,000	22	6,340
16,000	2	80	66,000	23	6,800
18,000	3	140	68,000	24	7,280
20,000	4	220	70,000	25	7,780
22,000	5	320	74,000	26	8,820
24,000	6	440	76,000	27	9,360
26,000	7	580	80,000	28	10,480
28,000	8	740	82,000	29	11,060
30,000	9	920	84,000	30	11,660
34,000	10	1,320	88,000	31	12,900
36,000	11	1,540	90,000	32	13,540
38,000	12	1,780	92,000	33	14,200
42,000	13	2,300	94,000	34	14,880
44,000	14	2,580	96,000	35	15,580
46,000	15	2,880	100,000	36	17,020
48,000	16	3,200	200,000	37	54,020
50,000	17	3,540	300,000	38	92,020
52,000	18	3,900	500,000	39	170,020
56,000	19	4,660	500,000+	40	.....
58,000	20	5,060	.....	.....	.....

To illustrate the use of this table, the surtax of the taxpayer whose normal tax has been computed above can be ascertained.

Net income	$120,000
Surtax on $100,000	$ 17,020
Surtax on 20,000 at 37%	7,400
$120,000	
Total surtax	$ 24,420

TAX ON CAPITAL NET GAIN.—The rate of tax applied to capital net gains in lieu of both normal and surtaxes is, under the 1924 law, 12½%. The normal and surtax on ordinary net income (i.e., excluding the capital net gain) is computed in the ordinary way. There is then added thereto 12½% of the capital net gain. If it is assumed that the gross income given in the example

above excludes a capital net gain of $100,000, there will be added to the normal and surtax as computed above, 12½% of $100,000 or $12,500. Since the application of the capital net gain is optional with the taxpayer, this procedure is only used when it is to the pecuniary advantage of the taxpayer. If the provision is not invoked, the capital net gain is included in gross income.

CAPITAL NET LOSS.—When a taxpayer has a capital net loss, he cannot reduce his tax by more than 12½% of the loss. The normal and surtax is computed on ordinary net income (i.e., computed without deducting the capital net loss) in the usual way. There is then deducted 12½% of the capital net loss. However, the tax so computed cannot be less than the tax computed in the usual way after the capital net loss has been deducted from the ordinary net income. In the example used above, assume that the capital net loss has not been considered and that it amounts to $8,000. From the normal and surtax as computed above there will be deducted 12½% of $8,000, or $1,000.

EARNED INCOME CREDIT.—The 1924 law provides for taxing so-called earned income, up to a maximum of $10,000, at a lower rate than other income. As heretofore stated, if the net income of an individual is less than $5,000, it is all considered as earned and even if the net income exceeds $5,000, the amount of earned income will not be considered as less than that amount. The **maximum allowance** is $10,000. Deductions properly applicable to the earned income must be subtracted therefrom. The earned income credit is a deduction from the tax as ordinarily computed. The credit is one-quarter of the tax on the earned income, assuming that it was the whole of the taxpayer's net income. Thus, everyone obtains an earned income credit, except those whose income arises entirely from sources not subject to normal tax, such as dividends, etc.

Assume that a taxpayer whose tax has been computed above, had included in gross income his income from a law firm amounting to $20,000, the earned income credit would be computed thus:

Earned income (maximum)		$10,000
Less: Personal exemption	$2,500	
Credit for dependents	800	3,300
		$ 6,700
Tax on $4,000 at 2%		$ 80
" " 2,700 " 4%		108
$6,700		
Total tax		$ 188
Earned income credit (25%)		$ 47

The taxpayer would deduct $47 from his tax as otherwise computed.

CREDIT FOR FOREIGN TAXES.—Citizens paying income and profits taxes to foreign countries or to possessions of the United States, residents paying such taxes to possessions of the United States, also residents paying such taxes to a foreign country (if their country of origin allows a similar credit to United States citizens resident therein), may obtain a deduction from their federal income tax as otherwise computed, known as the credit for foreign taxes. The amount of the credit is that proportion of the United States tax computed on the basis of the taxpayer's net income (without any deduction for any part of the foreign income and profits taxes) which the taxpayer's net income from sources without the United States (without any deductions for foreign income and profits taxes) bears to his total net income (without any deduction for foreign income and profits taxes). As an **example** of the computation of this credit the following official example may be considered:

Income from sources within the United States	$50,000
Income from sources without the United States	25,000
Total net income (without deduction of income and profits taxes paid or accrued to foreign countries or possessions of the United States)	$75,000
United States normal tax and surtax on $75,000	$13,290
Foreign income and profits taxes upon $25,000	5,000
Amount which may be credited against the United States tax ($\frac{25,000}{75,000}$ of $13,290)	$ 4,430

That part of the foreign taxes which is not allowed as a credit may be taken as a deduction from gross income. A recomputation of normal and surtax is required but not of the credit for foreign taxes.

In order to obtain the credit, form 1116 must be filed by individuals and form 1118 by corporations. Since accrued but unpaid foreign taxes may be the basis of the credit, a bond may be required in some cases. Taxpayers whether on the cash or accrual basis may obtain the foreign tax credit on the basis of accruing foreign taxes if so desired. An option once exercised controls future procedure. By taking advantage of the option, it is possible to obtain the foreign tax credit in the same year as the foreign income is returned for taxation. If a domestic corporation owns a majority of the voting stock of a foreign corporation it may obtain a tax credit in respect of foreign income and profits taxes paid by the foreign corporation. The credit consists of the same proportion of the foreign tax which the dividends received bears to the accumulated profits on which the foreign tax was paid or had accrued. The credit is subject to the same percentage limitation as outlined previously.

CREDIT FOR TAXES PAID AT SOURCE.—A deduction from the tax as otherwise computed may be made for any tax deducted at the source, including the 2% tax on tax-free covenant bonds.

RETURNS FOR LESS THAN A YEAR.—When as a result of a voluntary change of fiscal year by a taxpayer, a return is required for a fractional part of a year, the income has to be placed on an annual basis and taxed accordingly. This results in the payment by individuals of tax at a higher rate than would apply if the income were not placed on an annual basis, due to the stepping up of surtaxes. It makes no difference to corporations.

As an **example** of the necessary computation consider the following:

Net Income for 6 months	$20,000	
Placed on annual basis, $20,000 × 12/6	40,000	
Exemption: married (3 children)	3,700	
	$36,300	
Taxable at 2%	4,000	$ 80
Taxable at 4%	4,000	160
Taxable at 6%	28,300	1,698
	$36,300	
Surtax on $40,000		2,040
Total tax		$3,978
Divided by 2		$1,989
Less: Earned Income Credit:		
Earned Net Income, say	$ 5,000	
Exemption	3,700	
	$ 1,300	
Tax on $1,300 at 2%	$ 26	
25% of $26		6.50
Total tax payable		$1,982.50

Dividends and interest are also to be placed on an annual basis in such a case as the above. This procedure is only required when the return for a fractional part of a year results from the voluntary act of the taxpayer. In other cases, the tax is computed on the actual net income for the fractional period, the personal exemption and credit for dependents being proportionately reduced. In the special case of the return for a decedent for the fractional period since the end of his last taxable year to the date of his death, the tax is computed on the actual income, full credits and personal exemption being allowed. Since no tax is payable on partnership returns, the income does not have to be placed on the annual basis even if the fiscal year is voluntarily changed. The returns of fiduciaries follow the same principles as those of individual taxpayers.

FISCAL YEARS WHEN TAX RATES OR DEFINITIONS OF INCOME CHANGE.—Taxpayers reporting on a fiscal year basis have their tax problems complicated whenever changes are made in tax rates or when changes are made in the definition of income or allowance of deductions, since such changes are usually effective as of January 1. When such conditions occur **two computations** have to be made, the first under the earlier law and tax rates and the second under the later law and tax rates. In both computations the income for the full fiscal year is used. The tax payable is the sum of the proportionate parts of the sums so computed based on the number of months falling in each of the two calendar years.

As an example, consider the following, where the fiscal year ends June 30, 1924:

Income 1923 basis	$60,000	
Tax 1923 rates	8,955	
Income 1924 basis	50,000	
Tax 1924 rates	$ 6,095	
Tax applicable to six months in 1923		$4,477.50
Tax applicable to six months in 1924		3,047.50
Total tax for fiscal year		$7,525.00

PARTNERSHIPS HAVING FISCAL YEARS WHEN RATES CHANGE.—An even more complicated problem arises when an individual receives income from a partnership having a fiscal year when rates or the definition of income changes. This is due to the fact that the income arising under the earlier law is taxed to the individual at the rates then in force but by super-imposition upon the income applicable to the later law.

An example will make clear the working of this regulation.

Example: It is assumed that A, filing his return on a calendar year basis, has a one-fourth interest in a partnership with fiscal year ended June 30, 1924, that owing to differences between the 1921 and 1924 laws, the net income of the partnership is less when computed under the 1924 law than it is under the 1921 law, and that at least $10,000 of A's income is "earned net income."

Partnership income, 12 months ended June 30, 1924, as computed under 1924 law		$100,000
Partnership income, 12 months ended June 30, 1924, as computed under 1921 law		120,000
Partnership income taxable at 1923 rates—½ of $120,000	$60,000	
A's share—¼ taxable at 1923 rates		15,000
Partnership income taxable at 1924 rates—½ of $100,000	$50,000	
A's share—¼		$ 12,500
Other income in calendar year 1924		20,000
Total income taxable at 1924 rates		$ 32,500

The tax is computed as follows:			
Net income taxable at 1924 rates		$32,500	
Less exemption		2,500	
		$30,000	
Taxable at 2%	$ 4,000		$ 80
Taxable at 4%	4,000		160
Taxable at 6%	22,000		1,320
	$30,000		
Surtax at 1924 rates on $32,500			1,170
			$ 2,730
Earned net income credit:			
Maximum earned income under law	$10,000		
Less exemption	2,500		
	$ 7,500		
Taxable at 2%	4,000	$ 80	
Taxable at 4%	3,500	140	
	$ 7,500		
Tax payable if earned income were total income		$ 220	
Earned net income credit, 25% of $220			55
Total tax at 1924 rates			$ 2,675
Net income taxable at 1923 rates	$15,000		
Normal tax at 8%		$ 1,200	
Surtax at 1923 rates:			
On total income of $47,500	4,415		
On income taxable at 1924 rates, $32,500	1,775		
Surtax on $15,000 in higher brackets		2,640	
Total tax at 1923 rates			3,840
Total tax payable by A for calendar year 1924			$ 6,515

The 25% credit for reduction of 1923 tax under section 1201 (b) does not apply in this case. While the partnership return includes income earned in 1923, the return of the taxpayer in this case is for the calendar year 1924. The 25% credit applies to 1923 returns or the fiscal year return of a taxpayer falling partly in 1923. A partnership as such is not a taxpayer. In the example above, the taxpayer would, of course, be entitled to credit for 25% of the tax shown on his 1923 return, although he may have included therein partnership income partly accumulated in 1922.

Payment of Tax

Federal income tax is payable on March 15 following the close of the calendar year, or in the case of a fiscal year return, on the 15th day of the 3rd month following the close of such year. Thus the first payment is due on the same day as that on which returns must be filed. Although the tax is payable as aforesaid, calendar year taxpayers may elect to pay the amount in **four equal quarterly instalments** on March 15, June 15, September 15 and December 15. Corresponding dates apply in the case of fiscal year returns. Failure to pay any instalment on the due date may cause the unpaid balance to become due and payable upon notice and demand from the collector. No notice and demand is made in respect of the first instalment but notices are generally sent for the succeeding instalments. The fact that no notice is received does not excuse failure to pay on the due date. Taxpayers should preserve carefully the checks issued in payment of federal taxes so as to avoid the possibility of

having to pay the same item twice. If payment is made in cash taxpayers should insist on a receipt. It is not too long to keep evidences of tax payments for 10 years.

EXTENSIONS OF TIME.—The Commissioner is authorized to extend the time for payment of tax for a period not to exceed 6 months. Interest at 6% per annum is payable in respect of such extension. This provision applies only to the tax shown on original returns and not to an additional assessment. If a taxpayer can satisfy the Commissioner that the payment of an additional assessment will impose a hardship, the Commissioner may grant an extension of time for such payment, or part thereof, not to exceed 18 months. A bond will be required, not to exceed double the amount of unpaid tax. In lieu of a bond, United States obligations may be deposited in escrow. Interest at 6% per annum is payable in respect of such extensions. Extensions will not be granted where the additional assessment arises from negligence, intentional disregard of rules and regulations, or to fraud with intent to evade tax. If the tax is not paid at or before the expiration of the extension, interest thereafter will accrue at the rate of 1% per month.

MEDIA OF PAYMENT.—The tax may be paid in **cash** or in **certain issues of Treasury notes or certificates of indebtedness at par.** Collectors may accept certified or uncertified checks, but the responsibility of the taxpayer remains until the check is paid by the bank.

CORPORATIONS IN DISSOLUTION.—If a corporation dissolves and distributes all of its assets prior to receiving notice of an additional assessment, the tax may be collected by suit against the stockholders to the extent of any assets received in dissolution.

PAYMENTS BY FIDUCIARIES.—Liability for payment of tax attaches to the person of a fiduciary up to and after his discharge, where prior to distribution and discharge he had notice of the tax due or failed to exercise due diligence in ascertaining whether any such obligation existed.

PROTEST.—It was necessary formerly that taxes be paid under protest if subsequent suit for recovery was commenced. This is no longer necessary. However, if taxpayers so desire, taxes may be paid under protest by writing the words, "Paid under protest," plainly across the face of the check or by a protest contained in a letter of transmittal to the collector.

COMPROMISE OF PAYMENT.—The commissioner has power to compromise taxes due, interest and penalties. Compromises are considered when the payment of an additional assessment would **force a taxpayer into bankruptcy,** but when, if reduced in amount, it would be possible for the taxpayer to continue in business. **Excessive interest** may also be the subject of offers in compromise. **Technical offenses,** such as delay in filing returns, result in penalties. If such delay was not willful, the penalties may usually be compromised for $5 or $10. A special form is provided on which offers in compromise are submitted by taxpayers through the local collectors of internal revenue.

Additional Assessments and Appeal Procedure

AUDITING PROCEDURE.—The relationship of the various steps in determining a taxpayer's liability to additional tax is best understood from a consideration of the procedure followed in auditing returns.

When a taxpayer's return is received in the local collector's office, it is scrutinized for any obvious errors. The returns showing the larger net incomes are

listed and sent to the Bureau of Internal Revenue, Washington, D. C.; returns with small incomes are retained in the collector's office and audited in a way similar to that described for the larger returns. In due course **field agents** are sent out to verify the accuracy of the larger returns by inspection of taxpayer's records. Only one such examination for each year's return is permitted without written notification from the Commissioner that further examinations are necessary. In the case of the small returns, taxpayers are requested to visit the local collector's office to explain any items which the collector's staff consider questionable. It should not be overlooked that the small taxpayer has the same rights of appeal as taxpayers whose returns are sent to Washington.

Following the examination of returns by field agents, taxpayers receive **copies of the revenue agents' reports.** If an additional tax is shown to be due, the taxpayer may, within 30 days, file a protest with the local collector. A hearing may be requested in the protest. Full details should be given in the protest in support of the taxpayer's position. After considering the protest, the collector's office sends the file to the Bureau of Internal Revenue, either with a new report acquiescing in the taxpayer's contentions or with the original report and the taxpayer's protest.

When the file is received in Washington, the case is considered in the light of all evidence there available. If no additional tax is considered to be due, the taxpayer may or may not be informed. If an additional tax is proposed by the Treasury, the taxpayer is notified by an assessment letter. From the date of this letter, the taxpayer has 30 days to present a **protest to the Commissioner.** A hearing may be requested. The protest need only be a formal statement of alleged errors and brief reasons why they should be adjusted. Full details must be filed with the Bureau within 25 days after the protest was due or 5 days before the date set for a hearing.

If after consideration of the protest, supplemented by a hearing if requested, the taxpayer's contentions are allowed in whole or in part, he will be so informed by letter. To the extent that a taxpayer's contentions are disallowed, the Commissioner is said to "determine a deficiency," and the letter announcing his determination is called a "deficiency" or "60-day" letter. Within 60 days of the date of this letter, the taxpayer may file a petition to the **United States Board of Tax Appeals** (described later). The Board's decision is binding on the Commissioner as far as the assessment of the tax is concerned. If the board decides in the taxpayer's favor, the tax cannot legally be assessed, but the Commissioner must sue in the federal courts for its recovery. A decision in whole or in part against the taxpayer authorizes the Commissioner to assess the corresponding additional tax.

The additional tax is demanded by the local collector on receipt of assessment lists from the Commissioner. The tax is payable within 10 days of notice and demand; delinquent interest and penalties accrue if the tax is not paid when due. There is no way of postponing payment of an additional tax assessed after a taxpayer has had the right to appeal, as outlined above, whether he has taken advantage of it or not, except the extension which may be allowed when payment immediately would cause a hardship.

STATUTORY LIMITATION ON ASSESSMENTS.—Any additional tax must be assessed by the Commissioner **within 4 years** after the relevant final (not tentative) return was filed, except under acts prior to 1921 when the period was 5 years. This period is extended by 60 days if a deficiency letter has been mailed to the taxpayer and if no appeal is taken to the Board of Tax Appeals, or if an appeal is filed, by the number of days from the date of the deficiency letter to the date of final decision by the Board. Additional tax in

the case of a false or fraudulent return with intent to evade tax may be assessed at any time without limitation. This is also true of the determination of allowances for amortization of war facilities.

The statutory period for assessment may be extended by the filing of a waiver by the taxpayer. This is often necessary to avoid a jeopardy assessment. Upon written request by an executor or administrator, the Commissioner must determine and assess any additional tax resulting from the decedent's returns within one year thereof. It should be noted that "assessment" signifies the placing of the tax on a list and signature by the Commissioner. This is often some weeks prior to the receipt of a notice from the local collector.

JEOPARDY ASSESSMENTS.—Under the law an additional tax cannot legally be assessed until the taxpayer has had the right of appeal to the Board of Tax Appeals. However, there is a much abused provision which allows assessment before appeal when the Commissioner believes that the assessment or collection will be jeopardized by delay. This provision is usually invoked when the statutory period is running out and the audit of return is not complete. The taxpayer is often given the option of signing a waiver or receiving a jeopardy assessment.

If a jeopardy assessment is made, the taxpayer may file a claim in abatement accompanied by a bond not exceeding twice the tax assessed. Thereafter he will be accorded the right of appeal to the Board of Tax Appeals. If the taxpayer cannot furnish a bond, the tax must be paid although no appeal has been heard. Action for recovery must then be brought in the federal courts after filing a claim for refund.

INTEREST ON ADDITIONAL ASSESSMENTS.—Interest is payable at 6% per annum on additional taxes assessed in respect of the years 1921 to 1923 inclusive, from the original due date to the date of notice and demand by the collector and in respect of 1924 and subsequent years, from the due date to the date of assessment by the Commissioner. Additional assessments arising under laws prior to 1921 do not bear interest, unless claims for abatement were filed, when interest, in most cases at 6% per annum, is payable from the date of filing such claim until the date of payment.

BOARD OF TAX APPEALS.—The United States Board of Tax Appeals is a quasi-judicial body established under the 1924 law for the purpose of giving taxpayers an opportunity for an impartial hearing before the payment of additional tax. It passes on cases arising under deficiencies of income tax and federal estate tax determined by the Commissioner, and under determinations made by the Commissioner after June 2, 1924, on claims for abatement (including jeopardy assessments).

The procedure comprises the filing of a petition with the board within 60 days from the mailing date of the Commissioner's deficiency letter or determination under a claim for abatement. An answer is filed by the Solicitor of Internal Revenue. In due course the case is argued before a division of the Board or before the whole Board. Rules of evidence are strictly followed. Decisions are made in all cases, but opinions are only required when the deficiency exceeds $10,000. Since the procedure is similar to court practice, taxpayers are advised to have appeals handled by experienced practitioners. There is, however, no inhibition against a taxpayer handling his own case. Only attorneys and certified public accountants may represent taxpayers before the Board. If a decision of the Board is in favor of the taxpayer, the Commissioner cannot legally assess the additional tax. The Commissioner's remedy is by suit in the federal courts, which must be begun within one year of the Board's decision.

As the rules of the board are being changed from time to time, and as the procedure is highly technical, those desiring complete information should consult "Montgomery's Income Tax Procedure."

DISTRAINT.—If a taxpayer fails to pay an assessment within 10 days of a notice and demand, a second notice is usually sent. Failure to pay usually results in the issuance of a distraint warrant with or without the filing in the district court of a lien against the taxpayer's realty. Such proceedings must be begun within 6 years after the assessment of the tax. If begun after that period, the proceeding is illegal and the tax paid thereunder may be recovered. This limitation period also applies to suits by the Commissioner for the recovery of taxes, except when such suit follows an adverse decision of the Board of Tax Appeals.

FINAL DETERMINATIONS.—After a determination of a taxpayer's liability, an agreement may be entered into in writing between the Commissioner and the taxpayer that such determination shall be final. Thereafter the case cannot be reopened except upon a showing of fraud or misrepresentation. A formal request is made to the Commissioner for such an agreement.

Claims for Refund, Credit, Abatement—Suits

If a taxpayer believes that he has overpaid his tax for any year, he may file a claim for refund or credit.

CLAIMS FOR REFUND.—Form 843 is used and all relevant facts are recited thereon under oath. Separate claims should be filed for each year. Claims are filed with the collector to whom the tax in question was paid, even if the taxpayer is now in another district. The filing of claims for refund is a condition precedent to suit for recovery of taxes overpaid.

LIMITATION PERIODS FOR REFUND CLAIMS.—The law provides certain periods during which refund claims must be filed. If not filed within such periods, the overpaid tax cannot be recovered. The limitations are as follows:

1921 and subsequent years—4 years from date of payment.
1920—5 years from due date of return.
1919—5 years from due date of return or April 1, 1926 if waiver filed on or before June 15, 1925 or April 1, 1927 if such waiver extended before expiration.
1918—5 years from due date of return or April 1, 1925, if waiver filed on or before June 15, 1924 or April 1, 1926 if such waiver extended before expiration.
1917—5 years from due date of return or April 1, 1925 if waiver filed within 5 years from due date of return or April 1, 1926 if such waiver was extended before expiration.

There is no limitation of time during which the Commissioner may make refund of taxes overpaid for any year as a result of deductions not taken in such year, which cause a reduction of invested capital in any of the years 1917 to 1921 inclusive. The Commissioner may allow the refund of taxes overpaid without the filing of any claim, if such allowance is made within the statutory period as above stated. Too much reliance should not be placed on apparent overassessments shown by Treasury letters. Safety counsels the filing of a claim for refund. The filing of claims for refund within the statutory period permits the Commissioner to repay at any time taxes previously overpaid.

REOPENING CLAIMS.—A claim for refund heretofore disallowed may be reconsidered by the Commissioner upon application setting forth that a court decision acquiesced in by the Treasury has been rendered, or that the Treasury practice has been changed by subsequent regulations, rulings or decisions. By filing claims for refund, taxpayers will obtain the advantages arising from subsequent favorable decisions; if the claim had not been filed, the statute of limitations might prevent the repayment of the admittedly overpaid tax.

INTEREST ON REFUNDS.—When a refund is allowed interest is payable to the taxpayer at 6% per annum from the date of overpayment of the tax to the date of allowance by the Commissioner.

LIMITATION ON AMOUNT OF REFUND.—No refund may exceed the tax paid during the four years preceding the filing of the claim. This means that a claim filed on the basis of the refund of an additional assessment is limited to the amount of the assessment and that none of the original tax can be recovered unless the claim is filed within 4 years of the original payment. This limitation does not apply to claims for refund for any of the years 1917, 1918 or 1919 filed within the extended periods allowed to taxpayers who filed waivers nor to refunds resulting from the reduction of invested capital by the Commissioner due to the fact that certain deductions were not taken in prior years. Furthermore, any claim filed prior to June 2, 1924, which would have been allowable at the time of filing but for this limitation will not be subjected to the limitation, nor will a claim for 1920 filed within 5 years after the due date of the return.

CLAIMS FOR CREDIT.—When there has been an overpayment of taxes for one year such overpayment, by means of a claim for credit, may, in some cases, be applied in reduction of the tax liability of another year. The adjustment is considered temporary until the claim for credit is allowed by the Commissioner. However, the use of the claim for credit is so restricted that it can be considered almost non-existent for most taxpayers. The form used is the same as for refund claims—form 843—and similar information is required. A bond or other security may be demanded by the collector with whom the claim is filed. Interest is allowed on claims for credit from the date of overpayment to the date when applied by the taxpayer in reduction of another year's tax liability. The statutory period within which claims for credit must be filed are the same as those for refund claims heretofore stated.

CLAIMS FOR ABATEMENT.—These claims, on form 843, can now be filed only when so-called jeopardy assessments (assessments made before taxpayer has had the right of appeal) are made. When assessments other than jeopardy assessments are made, the amount thereof must be paid on demand. Claims for abatement must be accompanied by a bond not exceeding twice the amount of the claim. When so filed, no further action will be taken to collect tax until the Board of Tax Appeals has decided the case. Interest at 6% per annum is payable on the disallowed part of a claim for abatement.

SUITS BY TAXPAYER.—Before a taxpayer may sue in the federal courts for the recovery of tax overpaid or illegally collected, **a claim for refund or credit** must have been filed within the statutory period for such claims. Payment of the tax under protest is no longer required. No suit can be commenced before the expiration of six months after the filing of the claim for refund unless the Commissioner renders a decision on the claim before that time. Suit cannot be commenced after 5 years from the date of payment of the tax or after 2 years from the rejection of a claim for refund by the Commissioner —whichever is later. The Commissioner must notify the taxpayer of the

rejection of a claim for refund within 90 days of the disallowance. State courts have no jurisdiction over refunds of federal taxes, so that suits must be commenced either in the Court of Claims of the United States or in a United States District Court.

Penalties

A number of penalties for various offenses are provided by the Revenue Act and also by the Revised Statutes. Only a few of these can be considered here.

UNDERSTATEMENT OF TAX.—If due to negligence or intentional disregard of rules and regulations—5% of deficiency.

If due to false or fraudulent return with intent to evade tax—50% of deficiency.

FILING RETURNS, COLLECTING TAXES, ETC.—Willful failure to pay tax, make any return, keep record, supply information—maximum fine $10,000 or maximum imprisonment one year, or both, with costs.

Willful failure to collect or account for tax, or willful attempt to evade or defeat tax—maximum fine $10,000 or maximum imprisonment 5 years, or both, with costs.

Willfully aiding in preparation of false or fraudulent return, affidavit or of advising the preparation of such false or fraudulent return, maximum fine $10,000 or maximum imprisonment 5 years, or both, with costs.

Failure to make return unless delay due to reasonable cause—25% of amount of tax.

FAILURE TO PAY TAX WHEN DUE.—An interest penalty of 1% per month is imposed when tax is not paid when due, whether on original return, after extension or after notice and demand. In the case of estates of incompetent, deceased or insolvent persons, only 6% per annum is charged.

COMPROMISE.—As heretofore stated, the Commissioner will consider the compromise of penalties and interest if an offer is made by the taxpayer.

Information Returns and Withholding

Certain information returns have to be filed by individuals and corporations. Tax at specified rates is to be withheld by the payor on payments to certain classes of individuals.

PAYMENTS OF $1,000.—All persons making payment to another person of fixed or determinable income (explained hereinafter) of $1,000 or over in any calendar year must make a return thereof to the Commissioner on or before March 15 of the following year. The return is on form 1099 accompanied by form 1096 showing the number of forms 1099 filed.

FIXED OR DETERMINABLE INCOME.—Income is fixed when it is to be paid in amounts definitely predetermined. It is determinable when a basis for calculation exists. Among income falling within these classifications are interest, rent, salaries, wages, commissions, premiums, annuities, compensations, remunerations, emoluments and royalties.

PAYMENTS NOT REQUIRING RETURNS.—Payments of the following classes need not be reported on information returns: payments of any kind to corporations, bills paid for merchandise, telegrams, telephones, freight, storage, for special services and similar charges; payments to real estate agents (but the agents report payments to landlords); payments by a broker to his customers; payments made by foreign branches of business houses to alien employees

serving in foreign countries. Since withholding returns have to be made in the case of payments to non-resident aliens, to partnerships having one or more non-resident alien members and having no office or place of business in this country and to foreign corporations not engaged in business in the United States, nor having any office or place of business in this country, information returns are not required as to such payments.

RETURN OF DIVIDENDS.—A return is now required annually on March 15 of dividends paid by corporations to stockholders. Payments of less than $500 need not be reported, otherwise the name and address of each stockholder with the amount paid must be furnished.

WITHHOLDING TAX AT SOURCE.—In general, withholding is required—

1. Of a tax of 6% in the case of fixed or determinable annual or periodical income payable to a non-resident alien individual or to a partnership not engaged in trade or business within the United States and not having any office or place of business therein, and composed in whole or in part of non-resident alien individuals, except—
   (a) Dividends of a class allowed as a credit.
   (b) Interest on deposits with persons carrying on the banking business, paid to persons not engaged in business in the United States and not having any office or place of business therein.
   (c) Interest upon corporate bonds with tax-free covenant clause.
2. Of a tax of 12½% in the case of fixed or determinable annual or periodical income (with the exceptions just stated) payable to a foreign corporation not engaged in trade or business within the United States and not having any office or place of business therein.
3. Of a tax of 2% in the case of interest payable to an individual or a partnership, whether resident or non-resident, or to a foreign corporation not engaged in trade or business within the United States and not having any office or place of business therein, upon bonds or other obligations of domestic or resident foreign corporations containing a so-called tax-free covenant clause.

EXEMPTION FROM WITHHOLDING.—A citizen or resident alien owning tax-free covenant bonds may obtain exemption from withholding by filing with the withholding agent form 1001 on or before February 1 of the following year. A resident alien should also file a certificate of residence on form 1078. No ownership certificate is required for interest on bonds not containing a tax-free covenant.

RETURNS OF TAX WITHHELD.—Withholding agents file monthly returns on form 1012 and forward ownership certificates to the Commissioner therewith. Annual returns on form 1013 are required on or before March 15. These returns are also filed with the Commissioner. An annual return on form 1042 is filed with the local collector on or before March 15. The tax withheld must be paid to the collector on or before June 15.

Publicity of Returns

Tax returns are public records and may only be inspected under orders issued by the President. **Individual returns** may be inspected by the taxpayer who made the return or his attorney; by his executor if the taxpayer has died; by heirs or next of kin. A **joint return of husband or wife** may be inspected by

either or by the executor of either. **Partnership's returns** may be inspected by any member thereof at the time covered by the return or by his executor or by his heirs or next of kin. **Estate returns** are open to inspection by the executor etc., or by heirs or next of kin. **Trust returns** may be inspected by the trustees, by a beneficiary or his executor, etc., or by heirs at law or next of kin having an interest therein. **Corporate returns** may be inspected by the president, vice-president, secretary or treasurer. Such returns may also be inspected by bona fide stockholders who are the owners of 1% or more of the outstanding stock.

Certain congressional committees may also examine returns filed by taxpayers. Proper officers of states may be given access to corporate (not individual) returns. Copies of returns may be furnished in court proceedings where the United States is an interested party or to a United States grand jury. Commencing with 1924, the name, address and amount of tax of every taxpayer is made public by the Commissioner through the local collectors. Unofficial disclosure of information acquired in the inspection of returns is forbidden under severe penalties.

Tax on Accumulated Surplus

If a corporation is formed or availed of for the purpose of preventing the imposition of a surtax on its stockholders by accumulating its profits to an unreasonable extent, instead of distributing them, a tax of 50% shall be paid on its "net income." This is in addition to the usual 12½% corporation tax. For the purpose of this tax "net income" includes dividends usually deductible and also the amount of interest on United States obligations issued since September 1, 1917. The fact that a corporation is a mere holding or investment company, or that profits are allowed to accumulate beyond the reasonable needs of the business is *prima facie* evidence of intent to escape the surtax. This presumption can be rebutted by a showing that the funds are required for present or future needs of the business. In other cases the payment of reasonable dividends is the best indication of intention. The retirement of preferred stock is a legitimate use for surplus earnings.

FEDERAL ESTATE TAXATION

NATURE OF TAX.—The present federal estate tax is an excise tax upon the right of every decedent to transfer his property at or in contemplation of death. It is not a tax on the property transferred and it differs from most of the state taxes on decedent's estates in that it is measured by the net estate as a unit, rather than by the distributive shares of the heirs or beneficiaries.

DEFINITION OF RESIDENTS AND NON-RESIDENTS.—For the purposes of the law, decedents are classified either as residents or non-residents without respect to citizenship. A resident is one who, at the time of his death, had his domicile in one of the states of the United States, or in Alaska, Hawaii or the District of Columbia, or one who was a citizen of the United States and with respect to whose property any probate or administrative proceedings are had in the United States Court for China. Foreign missionaries who were domiciled in the United States at the time they departed for the missionary field are presumed to be residents. All other foreign missionaries are non-residents.

Determination of Tax Liability

Every non-resident estate and every resident estate where the net estate is of a **value in excess of $50,000,** is subject to the tax at graduated rates.

RATES OF TAX.—The rates to be applied in any given case depend upon the statute which was in effect at the time of the decedent's death. On page 1627 will be found a table giving the rates applicable under the various acts, together with the periods covered by those acts.

GROSS ESTATE.—In the case of residents the value at the time of death of all property (except real property situated outside of the United States) which is subject to the payment of charges against the estate and the expenses of administration and subject to distribution as a part of the estate, should be included in the gross estate. In the case of non-residents the value of all property situated within the United States should be included. Real estate and stocks and bonds, physically located in the United States at the time of death, moneys due on open accounts by domestic debtors and stocks of corporations or associations of the United States, constitute property having a situs within the United States. The value of so-called tax-exempt bonds must be included in the gross estate.

Dower and Courtesy.—Dower and courtesy and all interests created by statute in lieu thereof are parts of the gross estates of decedents dying after 6:55 P. M., Washington time, February 24, 1919 (the effective date of the estate tax provisions of the Revenue Act of 1918).

Transfers in Contemplation of Death.—For the purposes of the law all transfers by the decedent during his lifetime, except bona fide sales for a valuable consideration in money or money's worth, in contemplation of or intended to take effect at or after death, are a part of the gross estate. Any transfer of a material part of the decedent's property within 2 years of death is presumed to have been made in contemplation of death. This presumption, however, may be rebutted.

Revocable Trusts.—Similarly any transfer or trust made by the decedent in his lifetime where the decedent at the time of his death had the right to alter, amend or revoke the transfer or trust or where such a right was relinquished in contemplation of death, is a part of the gross estate. In the case of a non-resident, if the property transferred or placed in trust was situated in the United States either at the time of transfer or at the time of death, the property so transferred is to be included in his gross estate.

Property Held Jointly.—Where property was held by the decedent and another, either as joint tenants or tenants by the entirety, the entire value of the property is prima facie a part of the decedent's estate. If the surviving tenant can show, however, that all or any part of the property or the consideration with which it was acquired was, at any time, transferred to the decedent by the survivor without fair consideration in money or money's worth, the value of such part is to be excluded. If property held by the entireties was acquired by gift or inheritance, only one-half of its value is to be included in the gross estate and if property held jointly was so acquired then only that portion is to be included to which the decedent would have been entitled in partition.

Powers of Appointment.—If the decedent exercised a general power of appointment theretofore vested in him, either by will or by deed executed in

Table for Computing Estate Tax

NET ESTATE			1			2			3			4			5		
			DATE OF DEATH														
Exceeding	Not exceeding	Amount of block	Sept. 9, 1916, to Mar. 2, 1917, inclusive (Revenue Act of 1916)			Mar. 3, 1917, to Oct. 3, 1917, inclusive (Amendment)			Oct. 4, 1917, to 6:55 p. m., Feb. 24, 1919, inclusive (Revenue Act of 1917)			From 6:55 p. m., Feb. 24, 1919, to 4:01 p. m., June 2, 1924, inclusive (Revenue Acts of 1918 and 1921)			After 4:01 p. m., June 2, 1924 (Revenue Act of 1924)		
			Rate (per cent)	Tax	Total	Rate (per cent)	Tax	Total	Rate (per cent)	Tax	Total	Rate (per cent)	Tax	Total	Rate (per cent)	Tax	Total
.....	$50,000	$50,000	1	$500	$500	1½	$750	$750	2	$1,000	$1,000	1	$500	$500	1	$500	$500
$50,000	100,000	50,000	2	1,000	1,500	3	1,500	2,250	4	2,000	3,000	2	1,000	1,500	2	1,000	1,500
100,000	150,000	50,000	2	1,000	2,500	3	1,500	3,750	4	2,000	5,000	2	1,000	2,500	3	1,500	3,000
150,000	250,000	100,000	3	3,000	5,500	4½	4,500	8,250	6	6,000	11,000	3	3,000	5,500	4	4,000	7,000
250,000	450,000	200,000	4	8,000	13,500	6	12,000	20,250	8	16,000	27,000	4	8,000	13,500	6	12,000	19,000
450,000	750,000	300,000	5	15,000	28,500	7½	22,500	42,750	10	30,000	57,000	6	18,000	31,500	9	27,000	46,000
750,000	1,000,000	250,000	5	12,500	41,000	7½	18,750	61,500	10	25,000	82,000	8	20,000	51,500	12	30,000	76,000
1,000,000	1,500,000	500,000	6	30,000	71,000	9	45,000	106,500	12	60,000	142,000	10	50,000	101,500	15	75,000	151,000
1,500,000	2,000,000	500,000	6	30,000	101,000	9	45,000	151,500	12	60,000	202,000	12	60,000	161,500	18	90,000	241,000
2,000,000	3,000,000	1,000,000	7	70,000	171,000	10½	105,000	256,500	14	140,000	342,000	14	140,000	301,500	21	210,000	451,000
3,000,000	4,000,000	1,000,000	8	80,000	251,000	12	120,000	376,500	16	160,000	502,000	16	160,000	461,500	24	240,000	691,000
4,000,000	5,000,000	1,000,000	9	90,000	341,000	13½	135,000	511,500	18	180,000	682,000	18	180,000	641,500	27	270,000	961,000
5,000,000	6,000,000	1,000,000	10	100,000	441,000	15	150,000	661,500	20	200,000	882,000	20	200,000	841,500	30	300,000	1,261,000
6,000,000	7,000,000	1,000,000	10	100,000	541,000	15	150,000	811,500	20	200,000	1,082,000	20	200,000	1,041,500	30	300,000	1,561,000
7,000,000	8,000,000	1,000,000	10	100,000	641,000	15	150,000	961,500	20	200,000	1,282,000	20	200,000	1,241,500	30	300,000	1,861,000
8,000,000	9,000,000	1,000,000	10	100,000	741,000	15	150,000	1,111,500	22	220,000	1,502,000	22	220,000	1,461,500	35	350,000	2,211,000
9,000,000	10,000,000	1,000,000	10	100,000	841,000	15	150,000	1,261,500	22	220,000	1,722,000	22	220,000	1,681,500	35	350,000	2,561,000
10,000,000	.....	.....	10	.....	.....	15	.....	.....	25	.....	.....	25	.....	.....	40	.....	.....

contemplation of death, the value of the property affected by the power is a part of the gross estate.

Insurance.—Insurance payable to the decedent's estate is a part of the gross estate for the purposes of taxation. Insurance payable to others is to be included to the extent that it exceeds $40,000 in amount.

Deductions from Gross Estate—Residents.—In arriving at the net estate in the case of a resident decedent the following deductions should be made from the value of the gross estate:

1. Funeral expenses.
2. Administration expenses.
3. Claims against the estate to the extent incurred bona fide for a fair consideration in money or money's worth.
4. Unpaid mortgages upon or indebtedness in respect of property situated in the United States to the extent incurred or contracted bona fide and for a fair consideration in money or money's worth.
5. Losses incurred during the settlement of the estate arising from fire, storm, shipwreck or other casualty or from theft to the extent not compensated for by insurance or otherwise.
6. A reasonable amount for the support of dependents during the settlement of the estate; provided such amount is allowed by the laws of the jurisdiction under which the estate is being administered.
7. The value of any property which has been taxed by the federal government as a part of the gross estate of a decedent who died within 5 years of the decedent and the value of any property which has been taxed by the federal government under the gift tax law within 5 years of the death of the decedent.
8. The amount of all testamentary transfers and gratuitous transfers in contemplation of death (a) to or for the use of the United States, the states, territorites, political subdivisions thereof and the District of Columbia for exclusively public purposes; (b) to or for the use of corporations, trustees, etc., for exclusively religious, scientific, literary or educational purposes.
9. The specific exemption of $50,000.

Non-Residents.—No deductions are allowed in the case of a non-resident unless the return discloses the value of all of that part of the gross estate not situated in the United States. No specific exemption of $50,000 is allowed to non-residents. In the case of non-residents, that proportion of the items listed as numbers 1 to 6 above which the value of the gross estate situated within the United States bears to the value of the entire gross estate may be deducted from the value of the gross estate situated within the United States; but in no case shall the amount so deducted exceed 10% of the value of the gross estate situated in the United States.

The deduction for property taxed within 5 years, listed as item 7 above, is allowed in the case of non-residents, provided the property was situated within the United States at the time of the death of the prior decedent.

The deduction for public and charitable gifts listed above as item 8 is allowed to non-residents provided the gift is to be used for public or charitable purposes within the United States.

VALUATION OF PROPERTY.—Property included in the gross estate should be included at its fair market value at the time of the decedent's death. As nearly as possible the price at which the property would change hands between a willing buyer and a willing seller should be determined.

Credits

STATE INHERITANCE TAXES.—After the federal estate tax has been computed there should be deducted therefrom, as a credit, the amount of any estate, inheritance, legacy or succession taxes actually paid to any state or territory of the United States in respect to any property included in the gross estate. This credit will only be allowed to the extent of 25% of the federal estate tax.

GIFT TAX.—If a gift tax has been imposed upon a transfer made by the decedent and thereafter upon his death, the same property is required to be included in the gross estate for the purposes of the estate tax, the amount of such gift tax is to be credited against the estate tax.

Returns

PRELIMINARY NOTICE; RESIDENT ESTATES.—Within 2 months of the death of a resident decedent whose gross estate exceeded $50,000 in value, or within 2 months after the appointment of an executor or administrator of such an estate, the executor or administrator, or in the event no executor or administrator has been appointed, any person in possession of any property of the decedent, should notify the collector of internal revenue in whose district the decedent was domiciled at the time of his death, by filing form 704 in duplicate.

PRELIMINARY NOTICE; NON-RESIDENT ESTATES.—In like manner, in the case of non-resident decedents who owned any property situated in the United States, regardless of value, form 705 should be filed in duplicate in the office of the collector of internal revenue in whose district the property was located, or if located in more than one district, in the office of the Collector of Internal Revenue designated by the Commissioner of Internal Revenue.

THE TAX RETURN—WHEN REQUIRED.—Estate tax returns are required in the case of all non-resident decedents who owned any property situated within the United States. In the case of residents, returns are only required if the gross estate exceeds $50,000 in value.

Time of Filing.—Within one year of the decedent's death, a return on form 706 must be filed under oath, setting forth—(1) the value of the gross estate, or in the case of a non-resident, the value of the gross estate situated within the United States; (2) the deductions claimed (if deductions are claimed by a non-resident estate, the value of the gross estate wherever situated must be disclosed); (3) the value of the net estate; (4) the tax paid or payable thereon.

Extension of Time for Filing.—In case of sickness or absence, Collectors of Internal Revenue may extend the time for filing for a period not in excess of 30 days from the due date. The Commissioner of Internal Revenue, upon application showing good and sufficient cause, may extend the time for filing for not exceeding 6 months from the due date, no single extension to exceed 2 months.

By Whom Filed.—The return should be prepared and filed by the executor or administrator, or if there be more than one, by all of them jointly. If no executor or administrator has been appointed, any person in possession of any property of the decedent is required to prepare and file the return. If no return is filed or if a false or fraudulent return is filed, the Commissioner of Internal Revenue

or any collector or deputy collector of internal revenue may make and file the return.

Where Filed.—In the case of a resident decedent, the return should be filed in the office of the collector of internal revenue in whose district the decedent was domiciled at the time of his death. In the case of a non-resident decedent, the return should be filed in the office of the collector in whose district the decedent's property in the United States was situated, or if the property was situated in more than one district, in the office of the collector designated by the Commissioner of Internal Revenue.

Will to be Filed with Return.—If the decedent dies testate, two copies of the will, one of which must be certified, should be filed with the return.

Payment of Tax Disclosed by Return—Time of Payment.—The tax is payable 1 year from the date of the decedent's death.

Extension of Time for Payment of Tax Disclosed by Return.—The Commissioner may, where it is shown under oath that payment of the tax on the due date would impose an undue hardship upon the estate, extend the time for payment of the tax disclosed by the return for a period not to exceed 5 years. In such cases the Commissioner may require a penal bond as a condition to the granting of such extension.

Interest on Tax Disclosed by Return.—If the tax disclosed by the return, or any portion of it, is not paid on or before the due date and no extension of time for payment has been granted, such unpaid portion bears interest at the rate of 1% per month from due date until paid. If an extension of the time for payment has been granted, interest at the rate of 6% per annum from 18 months after the death of the decedent to the expiration of the extension is added to the tax even though the tax is paid prior to the expiration of the extension. In addition, if the time for payment has been extended and the tax is not paid prior to the expiration of the extension, interest at the rate of 1% per month from the date of the expiration of the extension to the date of payment is added.

Means of Payment.—The tax may be paid either by cash, check collectible at par or with bonds of the United States issued under the provisions of the First and Second Liberty Loan Acts, bearing interest at a rate higher than 4% per annum. If bonds are tendered in payment they will be accepted at their par value, but they must have been owned by the decedent continuously for at least 6 months prior to the date of his death.

Procedure after Return is Filed

INVESTIGATION OF RETURNS.—An investigation of every return, to verify its accuracy, is made by special officers of the Bureau of Internal Revenue. The reports of these officers are forwarded to the Estate Tax Division of the Miscellaneous Tax Unit of the Bureau of Internal Revenue in Washington. Here they are again examined and if it appears that a tax in excess of that properly due has been paid, the excess is refunded. If it appears that less tax has been paid than that properly due, the executor or administrator is notified of the deficiency by letter.

HEARINGS IN BUREAU OF INTERNAL REVENUE.—Within 30 days after the date of the letter notifying the estate of an alleged deficiency in tax, a protest may be filed and a hearing requested. At any time prior to 5 days before the date of the hearing the estate may present evidence in support of its

claim. If, at the hearing, the representatives of the estate and of the Estate Tax Division are unable to agree, an appeal may be taken to the Solicitor of Internal Revenue. Such an appeal to the Solicitor must be taken within twenty days after the estate is notified of the action of the Estate Tax Division.

APPEALS TO BOARD OF TAX APPEALS.—If, after the proceedings in the Bureau, the Estate Tax Division and the Solicitor still maintain that there is a deficiency in tax, the estate will be notified by registered mail. Within 60 days from the date of mailing of such notice the estate may appeal to the Board of Tax Appeals.

JEOPARDY ASSESSMENTS.—In any case where the Commissioner believes that the assessment or collection of tax will be jeopardized by delay, he may make an immediate assessment. In such case the executor may file a claim for abatement and if the claim is rejected, may appeal to the Board of Tax Appeals.

PERIOD WITHIN WHICH DEFICIENCY ASSESSMENT MAY BE MADE.—Except in the case of a false or fraudulent return, estate taxes must be assessed within 4 years after the return was filed. In the case of a false or fraudulent return assessment may be made at any time.

PAYMENT OF DEFICIENCY TAX.—If a deficiency in tax is established either by acquiescence therein by the estate, by failure of the estate to appeal to the Board of Tax Appeals or by a decision of the Board of Tax Appeals, the same is payable within 30 days from the date of notice and demand thereof.

EXTENSION OF TIME FOR PAYMENT OF DEFICIENCY TAX.—If the Commissioner finds that the payment of the deficiency in the tax upon the prescribed date would impose undue hardship upon the estate, he may, with the approval of the Secretary of the Treasury, extend the time for payment for not exceeding 2 years, in which case he may require a penal bond conditioned upon the payment of the tax.

INTEREST ON DEFICIENCY TAX.—In the case of a deficiency in tax, unless an extension of time for payment thereof has been granted and unless a claim for abatement thereof is filed, there is assessed as a part of the deficiency, interest at the rate of 6% per annum from the original due date (1 year from the decedent's death) to the date the deficiency is assessed. If the amount so assessed is not paid within 30 days from the date of notice and demand thereof, interest at the rate of 1% per month is added.

If an extension of time for the payment of the deficiency has been granted interest at the rate of 6% per annum for the period of the extension (even though the tax is paid prior to the expiration of the extension) is added. If the tax and interest are not paid at or prior to the expiration of the extension, interest at the rate of 1% per month from such expiration to the date of payment is added.

If a claim for abatement is filed and is disallowed by the Commissioner, or by the Board of Tax Appeals if an appeal has been filed, an amount equal to 6% per annum on the amount disallowed from the date of notice and demand following the jeopardy assessment and preceding disallowance to the date of the notice and demand following disallowance is added. If the tax and interest are not paid within 30 days of the date of the notice and demand following disallowance of the claim, interest at the rate of 1% per month from the date of such notice to the date of payment is added.

Claims

CLAIMS FOR REFUND.—A claim for the refund of any tax, interest or penalty alleged to be excessive or illegal may be filed within 4 years after payment.

CLAIMS FOR ABATEMENT.—If a jeopardy assessment has been made but not otherwise, a claim for abatement may be filed within 30 days from the notice and demand for the tax so assessed.

FORM OF CLAIM.—Both claims for refund and claims for abatement should be made on Form 843.

Penalties

KNOWINGLY MAKING FALSE NOTICE OR RETURN.—Anyone who knowingly makes any false statement in a notice or return is liable to a penalty of not exceeding $5,000 or to imprisonment for not exceeding one year or both.

In addition to the specific penalty above mentioned, 50% of the amount of the tax is added in the case of a false or fraudulent return with intent to evade tax.

FAILURE TO FILE NOTICE OR RETURN OR FURNISH EVIDENCE.—Anyone whose duty it is to file a notice or return and who fails to do so or who has in his possession or control any record, file or paper containing or supposed to contain information with reference to the estate or who has in his possession or control any part of the gross estate of the decedent and who fails to exhibit the same upon the request of the Commissioner of Internal Revenue or any collector or law officer of the United States is liable to a penalty of not exceeding $500 to be recovered with costs in a civil action in the name of the United States.

WILLFUL FAILURE TO MAKE RETURN, PAY TAX, KEEP RECORDS OR SUPPLY INFORMATION.—Any person required by law to pay a tax make a return, keep any records or supply any information and who willfully fails to do so, may, upon conviction, be fined not more than $10,000 or imprisoned for not more than one year or both.

WILLFUL ATTEMPT TO EVADE OR DEFEAT TAX.—A person convicted of a willful attempt to evade or defeat the tax may be fined not more than $10,000 or imprisoned for not more than 5 years or both. The same penalty is imposed on all persons who aid or advise in the preparation or presentation of a false or fraudulent return, affidavit, claim or document to be used in connection with any proceeding with reference to the tax.

FAILURE TO FILE RETURN ON DUE DATE.—If, without reasonable cause or as a result of willful neglect, a return is not filed at the time prescribed by law or within the time of any extension granted by the Commissioner of Internal Revenue, 25% of the amount of the tax is added. If the failure to file on time was due to a reasonable cause and was not due to willful neglect the 25% ad valorem penalty will not be imposed.

FEDERAL CAPITAL STOCK TAX

NATURE AND HISTORY OF TAX.—The federal capital stock tax is an excise tax on the privilege of doing business in a corporate capacity. The tax was first imposed in 1916 (Title IV of the Revenue Act of 1916) and became effective on January 1, 1917. It has been continued by succeeding revenue acts

CORPORATIONS REQUIRED TO FILE RETURNS.—Every corporation must file a return whether exempt or not (unless it has been notified officially that it is not liable for capital stock tax) and the determination of liability rests with the Commissioner. The term "corporation" includes associations and joint-stock companies, whether created by statute or by contract, but not partnerships, properly so called. It is immaterial whether or not the companies were organized for profit or have a capital stock represented by shares.

FORM TO BE USED.—Every **domestic corporation** shall make a return on Form 707. Every **foreign corporation** carrying on or doing business in the United States shall make return on Form 708, irrespective of the amount of capital employed in this country in the transaction of its business. The capital actually employed in the transaction of the business of a foreign corporation in the United States and the tax payable thereon shall be calculated in accordance with the instructions on the form.

CORPORATIONS EXEMPT FROM TAX.—The following classes of corporation are exempt from the tax:

1. The 13 classes of corporations not subject to the federal income tax (see Exempt Corporations hereinbefore).
2. Corporations "not doing business" (hereinafter illustrated).
3. Insurance companies (excepting mutual companies subject to the income tax imposed by section 230).
4. Corporations, the fair value of whose capital stock for the preceding year does not exceed $5,000.

"NOT DOING BUSINESS" ILLUSTRATED.—"Holding companies as distinguished from parent corporations, and corporations all of whose property and business is operated by, or is in the hands of, a receiver or the Alien Property Custodian, are not doing business.

"A **holding company** is defined as one whose corporate powers are limited to the mere owning and holding of property and distribution of its avails, or one which, although incorporated for the purpose of doing business, has substantially retired from the business for which it was organized and has reduced its activities to the mere ownership and holding of property, distributing its avails, and doing only such acts as are necessary to the maintenance of its corporate existence and the private management of its purely internal affairs.

"A holding company, as above defined, will not be considered to be doing business by reason of the reinvestment of its surplus income or funds to the extent only of maintaining its original investments." (Reg. 64 Rev., Art. 13.)

RETURN BY CORPORATION CLAIMING EXEMPTION.—"As corporations are generally organized to do business, every existing company is presumed to be subject to the tax unless satisfactory evidence is submitted showing that it is exempt. Organizations claiming exemption should fill out Form 707 but instead of computing the tax should enter in the space provided for the computation the notation 'Exemption claimed.' The determination of liability rests with the Commissioner of Internal Revenue and without complete information it is impossible to make a decision. Therefore in all such cases the return so filled out must be filed with the collector, together with a comprehensive statement of the reasons for claiming exemption except as provided hereinafter.

"When a corporation has once established to the satisfaction of the commissioner that it is an insurance company or a corporation entitled to exemption under section 231 of the law, and has been notified officially that it is not liable for capital stock tax, it need not thereafter file a return, unless it changes the

character of its organization or operations or the purpose for which it was created.

"Any change in status of an organization from that on which exemption was predicated, will make the organization affected liable for filing a complete return in July following the change, and failure to file will subject the corporation to the penalty provision of the law covering delinquent filing of returns.

"Collectors will keep a list of the exempt organizations to the end that they may occasionally inquire into the status and ascertain whether or not they are observing the conditions upon which exemption is predicated.

"Any corporation claiming exemption on the ground of not being engaged in business or on any ground other than those specified hereinbefore is not affected by the foregoing provisions and must file a capital stock tax return, as required by law, in July of each year. In such cases, however, if exemption has been allowed for the preceding taxable year and there has been no change in the status or conditions of the company then the first 13 numbered lines of Form 707 should be completed and a statement attached to the effect that exemption is claimed for the same reasons as for the previous year and that the same status and conditions of the company exist for the taxable period in question. In this way the records of the collectors' offices will be complete and corporations will avoid requests for the filing of returns and unnecessary correspondence." (Reg. 64 Rev., Art. 31.)

PERIOD COVERED BY RETURNS.—The period covered by the return is the fiscal year from July 1st of one year to June 30th of the following year.

"The tax being payable in advance does not apply to any corporation which was not engaged in business during any part of the fiscal year preceding the year for which the tax is due, but if it was in business even one day of the preceding year and one day of the taxable year it is subject to the tax. There is no relation between the amount of the tax payable and the length of time the corporation was in business. A corporation engaged in business during a part of the preceding year, but not engaged in business at the beginning of the taxable year, is not required to make any return if it is dissolved.

"If it is in process of dissolution, a return complete in all details should be filed, with supplemental statement showing that it has discontinued all business activities excepting such only as are necessary to effect the dissolution. If it is only temporarily inactive and subsequently during the year re-engages in business it should file a return in the month in which it recommences business and pay the tax due from the first of such month to the end of the taxable year. A corporation organized and beginning corporate activities on or after July 1 is not subject to tax for the remainder of the taxable period in which the company was organized, unless, as of July 1, it takes over the business of an organization which was subject to capital stock tax, in which event the new corporation is required to file a return and pay the tax. In the case of foreign corporations 'engaged in business' means the transaction of any business within the United States." (Reg. 64 Rev., Art. 28.)

COMPUTATION OF TAX.—On **domestic corporations,** the tax is imposed at the rate of $1 for each full $1,000 of the fair average value of the capital stock of the corporation in excess of the prescribed deduction of $5,000. The tax is measured by the fair average value for the year preceding the taxable year, not the fair value of the average capital stock. If a corporation begins business within the preceding year or increases or decreases its capital within the preceding year, thereby materially changing the fair value of the capital stock, the tax is measured by the fair value of the capital stock outstanding at the date

of incidence of the tax (June 30). Therefore, while form 707 permits as a matter of convenience to the taxpayer, the using of a balance sheet of a date prior to June 30, but not prior to the preceding December 31, if there is a material change in the condition and affairs of the company affecting the fair value of the capital stock subsequent to the closing of the books and prior to the date of the incidence of the tax (June 30), the financial condition should be reported under Exhibit A as of June 30, giving effect to such material changes. However, the tax is imposed on "the fair average value of the capital stock for the preceding year ending June 30," and a balance sheet of that date which shows a net worth materially different from the average of the year should obviously not be used as the sole basis for determining the value on which the tax is to be imposed. Where necessary to make clear the average value during the year, taxpayers should append such additional statements or data pertaining to Exhibit A as will aid the Commissioner in determining the fair average value.

METHODS OF ASCERTAINING FAIR VALUE.—"The fair average value of the capital stock for the purpose of determining the amount of the capital stock tax must not be confused with the market value of the shares of stock where it may be necessary to determine such value under other provisions of the revenue laws. The fair average value of the capital stock, the statutory measure of the tax, is not necessarily the book value or the value based on prices realized in current sales of shares of stock or the value determined by capitalization of earnings.

"Form 707 provides Exhibit A for the book or fair value of the assets, Exhibit B for the market value of the shares, and Exhibit C for the value of the capital stock based on the capitalized earnings. All information called for must be given in every case where it is procurable. The fair average value of the capital stock of a corporation and the tax payable thereon shall be determined from a consideration of the data contained in the return as well as all elements and factors affecting values, which should be harmonized so far as possible in the ultimate fair value found. Fair value is required irrespective of the exhibit used or the method employed in its determination." (Reg. 64 Rev., Art. 15.)

The official instructions in the forms for the year beginning July 1, 1925, for filling out these exhibits are set forth on page 4 of the return as follows:

EXHIBIT A: CONDENSED BALANCE SHEET.—Furnish under Exhibit A a condensed balance sheet as of June 30, 1925, if possible, but in no case earlier than December 31, 1924.

"*Date of Balance Sheet.*"—Exhibit A requires data as of June 30, 1925, if possible, but in no case earlier than December 31, 1924. A corporation whose fiscal year ends between June 30 and December 31, 1924, and which finds it impossible to prepare a statement from the books as of June 30, 1925, may report in the "Books of account" column values as of the close of their last fiscal year preceding December 31, 1924, and will in every instance make use of the "Fair value" column to estimate values as of June 30 immediately preceding the taxable period. Capital stock will be shown in the "Fair value" column as a capital liability in the amount actually outstanding on June 30, 1925. This amount will agree with items 8, 9, and 10 on page 1 of the return, and no substitution of dates is permitted in either case. Where the books are closed in July or August, tentative return may be filed and completed return immediately after closing of books.

Banks should submit balance sheets as of June 30, 1925, in all cases. Published statements are acceptable unless reconstruction is necessary to reflect actual value.

"*Books of account.*"—These columns must show the amounts as carried in the taxpayer's books of account.

"*Fair value.*"—Refer to article 1 above defining the value required, and in the event that the columns "Books of account" contain any overstated or understated values show herein the actual values. If any different valuation is claimed than reported in the "Fair value" column it may be stated and should be supported by reasonably conclusive evidence.

"*Difference.*"—These columns will show the difference between the columns "Books

of account" and "Fair value." Any material differences *must be explained* in such manner as to enable the Commissioner of Internal Revenue to determine if they are proper and acceptable. For this purpose the differences shown herein need not be covered by corresponding adjustments in the taxpayer's books of account.

"*Profit and loss.*"—If the "Profit and loss" balance is a debit, the amount should be shown in red.

Reserves for the payment of future dividends, whether declared or not, will not be considered as liabilities, but a reasonable amount to cover the preceding dividend period may be so considered if the dividend has been declared and not disbursed. If deducted, show date declared and date of actual payment.

EXHIBIT B: QUOTATIONS OR OUTSIDE SALES PRICES.—Furnish under Exhibit B the prices quoted on a recognized stock exchange or on the New York curb, or the prices at which outside sales were made if the stock is not listed, for the period of 12 months ending June 30, 1925.

If the stock is listed, the name of the exchange from which reported quotations are taken must be shown in the space provided therefor, and the prices reported will be the mean of the highest and of the lowest bid price during each month, from which the average for the year will be obtained. If the taxpayer prefers, a schedule may be attached to this return showing the highest and lowest bid price at which stock was quoted for each day of the year and the average obtained therefrom.

If the stock is not listed and outside sales have been made at prices known or determinable by the officers making this report, such prices will be reported herein. A statement of the number of shares involved and the conditions under which sales were made at other than exchange quotations must accompany this return. Sales to employees or directors for qualifying purposes, or sales which are restricted as to resale, or sales at prices otherwise specially influenced, will not be considered representative of the fair value of the entire capital stock and should not be included.

In the column "Number of shares outstanding" should be shown the total number of shares outstanding at the close of each month. The average value per share will be determined as follows:

First. If no change occurred in the number of shares outstanding during the year, total the quotations or sales prices for the months reported and divide by the number of months in which quotations or sales prices are shown.

Second. If any change occurred in the number of shares outstanding during the year, multiply the average market price per share for the period during which the capital stock as of June 30, 1925, has been outstanding by the number of shares outstanding as of that date.

EXHIBIT C: ANNUAL INCOME.—Furnish under Exhibit C the annual income and other data for the five fiscal years ended with the close of the taxpayer's fiscal year or for the period during which the corporation has been engaged in business if for a shorter period.

"*Net income.*"—In this column will be shown the income returned for the purpose of the income tax and excess-profits tax.

"*Deductions*" *and* "*Additions.*"—Refer to article 1 of these Special Instructions and show in these columns such amounts as should be deducted from or added to "Net income" to arrive at the adjusted income which may be capitalized to determine the fair value of the capital stock. A comprehensive analysis of any amounts reported therein should be attached to this return. Some of the principal items frequently requiring adjustments are—

Deductions:

Income and profits taxes not deductible in computing income subject to tax.
Interest charges not deductible in computing income subject to tax.
Losses not fully deductible in computing income subject to tax.

Additions:

Dividends from other corporations not included in computing income subject to tax.
Income from securities of a State, municipality, or of the United States, not included in the income tax return.
The difference between depletion allowed in determining net income subject to Federal income tax and the actual depletion based on cost.

Expenditures made for additions and betterments, or reserves for such purposes, charged against income, whether direct or through expense.

"*Adjusted income.*"—This column will reflect the amounts resulting from the adjustment of the amounts shown in the three preceding columns.

"*Number of shares.*"—Herein should be given the total number of shares of all classes of stock outstanding at the close of each fiscal year.

"*Dividends declared.*"—Herein should be reported the percentage of dividends declared on each class of stock outstanding each year. The amount represented by the percentages shown in this column must not be deducted from the columns "Net income" or "Adjusted income."

"*Depreciation.*"—Hereunder will be reported the amount actually charged against income each year in the taxpayer's books of account for depreciation.

Capitalizing net income.—The officers making the return will capitalize the average annual income on a percentage basis that fairly represents, under the conditions obtaining in the trade in the locality, what representative enterprises must earn in order to maintain their stock at par. In other words, if enterprises engaged in a similar business must on the average earn 12 per cent on their issued capital stock to keep the value of their stock at par, the net income should be capitalized by dividing it by .12.

WHEN RETURNS SHALL BE FILED.—It shall be the duty of every corporation on or before the 31st day of July in each year to make a return to the collector of the district in which its principal place of business is located. If any corporation fails to make and file a return within the time prescribed by law or by regulation made under authority of law, or makes, willfully or otherwise, a false or fraudulent return, the collector or deputy collector shall make the return from his own knowledge and from such information as he can obtain through testimony, or otherwise. The Commissioner of Internal Revenue, from similar sources of information, may make a return or amend any return made by a collector or deputy collector. Any return so made and subscribed by the commissioner, or by a collector or deputy collector and approved by the commissioner, shall be prima facie good and sufficient for all legal purposes.

EXTENSION OF TIME.—If on account of sickness or absence of the officer of the corporation charged with making the return, it is impossible to prepare and file a return on or before the 31st day of July, the collector, upon application in writing, may allow an extension of time not exceeding 30 days from July 31st, in which to file the return. If extension is granted, the letter of the collector should be attached to the return. On no account is the Commissioner of Internal Revenue or the collector authorized to grant an extension of time in which to file capital stock tax returns in excess of 30 days from July 31.

TENTATIVE RETURN.—If for reasons, other than absence or sickness, beyond the control of the officers making the return, it becomes impossible to file a completed return within the time prescribed by law, a tentative return may be filed. The filing of a tentative return within the prescribed period will avoid the penalty for delinquent filing, but will not authorize the withholding of the tax. The regulations do not permit the filing of a tentative return to stay indefinitely the filing of a completed return and the collection of the tax due. Therefore, if a tentative return is filed it should be clearly marked "Tentative Return" and should be prepared in as complete a manner as possible, including, among other information, a basis for the computation of the tax, that is, an estimate by the officers of the corporation of the approximate fair value of the capital stock in order that an initial assessment may be made. When the completed return is filed, it should be clearly marked "Completed Return," showing that a tentative return was filed. Such action will prevent duplicate assessments and ordinary penalties. In every case a statement should be attached to the tentative return, indicating the approximate date

the completed return may be expected. Upon receipt of the completed return any adjustment necessary in the assessment of the correct tax due will be made. Taxpayers who have paid the tax on the basis of a tentative return and subsequently the completed return shows less tax, should file a claim for refund of the excess with the completed return.

SIGNATURES AND VERIFICATION.—Returns must be signed and verified by the president and the treasurer of the corporation, and must be sworn to before an officer authorized to administer oaths, and the seal of the attesting officer, if he is required to have a seal, must be impressed on the return. In the absence of the president or treasurer, other responsible officers may sign the return. The name of the corporation and the names of the officers signing the return should be plainly written or printed on the return. If, however, the tax covered by the return does not exceed $10, the return may be signed or acknowledged before two witnesses instead of under oath.

RETURNS OF AFFILIATED CORPORATIONS.—Although consolidated returns for affiliated corporations are permitted for the purpose of income tax, for the purpose of capital stock tax each corporation must render a separate return in complete form. So-called subsidiary corporations, all or a part of the stock of which is owned by another corporation, must render separate returns. No deductions from the assets are permitted on account of intercompany balances, and the shareholdings must be reported in the "Fair Value" column at their actual worth at the time of making the return. No deduction is allowed in the return of one corporation for the tax paid by another. The parent company should submit with its return a list of all subsidiaries and the districts in which they are required to file returns; the number of shares of stock held in each subsidiary and the value at which carried on the books. If any agreement affecting independent operation exists between parent company and subsidiary, a copy thereof must be furnished, or a statement made that none exists.

A combined balance sheet and a combined net income statement may be submitted for consideration in connection with any estimate of fair value made on behalf of the reporting corporation.

In order to facilitate audit, parent companies should attach to the return a supplemental Exhibit C, showing consolidated income of the group.

TIME OF PAYMENT OF TAX.—The collector may accept payment of the tax when the return is filed as an "advance collection," subject to any adjustment later found necessary, but no corporation is required to pay the tax until after notice and demand. Tax due from a corporation which has liquidated is collectible by suit from the stockholders or others who have received its assets.

PENALTIES.—Any corporation which fails to pay the tax when due and payable is liable to a penalty of 5% and interest at 1% per month. If it willfully refuses to pay or willfully attempts to evade the tax, it is liable also to a fine of $10,000 and costs. Any officer or employee of a corporation who in the course of his duty fails to pay tax when due and payable, or if he willfully refuses to pay or willfully attempts to evade the tax, is liable to a fine of $10,000 and costs and to imprisonment for a year, and to a penalty of the amount of the tax unpaid or evaded.

A taxpayer who files a tardy return and wishes to avoid the penalty must make an affirmative showing of all the facts alleged as a reasonable cause for failure to file the return on time in the form of an affidavit, which should be attached to the return. If such an affidavit is furnished with the return or

upon the collector's demand the collector, unless otherwise directed by the Commissioner, will forward the affidavit with the return, and if the Commissioner determines that the delinquency was due to a reasonable cause and not to a willful neglect the penalty will not be assessed. If the taxpayer exercised ordinary business care and prudence and was nevertheless unable to file the return in the prescribed time, then the delay is due to "reasonable cause."

CLAIMS FOR ABATEMENT AND REFUND.—The Commissioner of Internal Revenue will follow the same general procedure in the treatment of fraudulent lists, statements or returns and the collection, abatement, and refund of capital stock taxes, as in the case of other internal revenue taxes.

Claims for credit are not permissible as will be noted from the following:

"Section 238 of the Revenue Act of 1924 provides for a credit against additional income taxes due to previous overpayments of income or excess-profits taxes. The law does not authorize the credit of an excess payment of capital stock tax for a given period against an assessment of the same or other tax for a previous or subsequent period. A claim for abatement or refund for the excess assessment should be filed and payment made of the correct tax due for the previous or subsequent period." (Reg. 64 Rev., Art. 32.)

TIME LIMITS FOR ADDITIONAL ASSESSMENTS AND REFUNDS.—Section 1009 of the 1924 law provides that, notwithstanding the provisions of section 3182 of the Revised Statutes, assessments of additional taxes must be made within four years after such taxes become due. In the case of fraud with intent to evade tax or willful attempt in any manner to defeat or evade tax, such tax may be assessed at any time. Section 1012 of the 1924 law, amending section 3228 of the Revised Statutes, provides that claims for refund of taxes erroneously or illegally assessed or collected must be filed within four years next after payment of such tax.

EXCISE TAXES

Excise taxes, imposed under Title VI of the Revenue Act of 1924, became effective on July 2, 1924, and supersede the taxes imposed by Title IX of the Revenue Act of 1921, which was repealed as of July 2, 1924. The following articles (listed alphabetically) sold or leased by the manufacturer, producer, or importer, are subject to tax in the following percentages, which are based upon the sale or lease prices:

	Tax
Automatic Slot-Device Machines: Coin-operated devices, coin-operated machines, and devices operated by any substitute for a coin	5%
If operated for profit by the manufacturer, producer or importer, the tax shall be based on the fair market value of each machine at the same rate as shown above.	
Automobile truck chassis and automobile wagon chassis, on the selling price in excess of $1,000 and on automobile truck bodies and automobile wagon bodies on the selling price in excess of $200 (including tires, inner tubes, parts and accessories, sold on or in connection therewith)	3%
Automobiles and motor cycles, other than above (including tires, inner tubes, parts and accessories, sold on or in connection therewith) except tractors	5%
A sale or lease of an automobile is considered to be a sale of the chassis and of the body.	

	Tax
Cameras, weighing not more than 100 lbs., and lenses therefor	10%
Cigars or cigarette holders and pipes, composed wholly or in part of meerschaum or amber	10%
Films and plates (photographic) except moving picture films and X-Ray films or plates	5%
Firearms, shells and cartridges, except those sold for use by the United States, any State, Territory or possession of the United States, any political subdivision thereof, or the District of Columbia	10%
Humidors	10%
Jewelry: Real or imitation; pearls, precious and semi-precious stones and imitations thereof; articles made of or ornamented, mounted or fitted with precious metals or imitations thereof, or ivory, watches, clocks, opera glasses, lorgnettes, marine glasses, field glasses and binoculars, sold by or for a dealer or his estate for consumption or use on selling price This tax **does not apply** to (1) surgical instruments, musical instruments, eyeglasses, spectacles or silver-plated flat tableware, or articles used for religious purposes; (2) articles sold or leased for an amount not in excess of $30, or (3) watches sold or leased for an amount not in excess of $60.	5%
Mah-jongg, pung chow and similar tile sets, and component parts thereof	10%
Statuary, sculpture, paintings, art porcelain, and bronzes sold by persons other than the artist (except when sold to any educational institution or public art museum, or by a dealer in such articles to another such dealer for resale)	5%
Tires, inner tubes, parts or accessories, for any articles listed under the headings "Automobile Trucks, etc.," and "Automobiles and Motorcycles, etc.," sold to a person other than a manufacturer or producer of any of the articles there mentioned	2½%

If any manufacturer, producer, or importer of any of the above articles customarily sells such articles both at wholesale and at retail, the tax in the case of any article sold by him at retail shall be computed on the price for which like articles are sold by him at wholesale.

SALE AT LESS THAN FAIR MARKET PRICE.—If any person who manufactures, produces or imports any article mentioned above, sells or leases such article to a corporation affiliated with such person within the meaning of section 240 of the 1924 law at less than the fair market price obtainable therefor, the tax thereon must be computed on the basis of the price at which such article is sold, or leased by such affiliated corporation; and if any such person sells or leases such article whether through any agreement, arrangement, or understanding, or otherwise, at less than the fair market price obtainable therefor, either (1) in such manner as directly or indirectly to benefit such person or any person directly or indirectly interested in the business of such person, or (2) with intent to cause such benefit, the amount for which such article is sold or leased must be taken to be the amount which would have been received from the sale or lease of such article if sold or leased at the fair market price.

RETURNS.—Every person subject to the tax must make monthly or quarterly returns in duplicate, under oath, and pay the taxes to the collector for the district in which the principal place of business is located, in accordance with

the regulations of the Commissioner. The tax is due at the time for filing the return. If the tax is not paid when due, there will be added as part of the tax interest at the rate of 1% for each full month, from the time when the tax became due.

TAX ON CIGARS, CIGARETTES AND TOBACCO.—Title IV of the Revenue Act of 1924 imposes the following taxes which are effective June 2, 1924, and are in lieu of those imposed by Title VII of the Revenue Act of 1921 repealed as of the above date:

	Tax
Cigars: Manufactured in or imported into the United States and sold or removed for consumption or sale:	
Weighing not more than 3 lbs. per 1,000; per 1,000	$ 1.50
Weighing more than 3 lbs. per 1,000 if manufactured or imported to retail at:	
Not more than $.05 each, per 1,000	4.00
More than $.05 and not more than $.08 each, per 1,000	6.00
More than $.08 and not more than $.15 each, per 1,000	9.00
More than $.15 and not more than $.20 each, per 1,000	12.00
More than $.20 each, per 1,000	15.00
Cigarettes: Manufactured in or imported into the United States and sold or removed for consumption or sale:	
Weighing not more than 3 lbs. per 1,000; per 1,000	$ 3.00
Weighing more than 3 lbs. per 1,000; per 1,000	7.20
The law prescribes the manner and size of packages in which cigars, cigarettes and tobacco should be packed. Manufacturers affix and cancel stamps denoting payment of the tax.	
Tobacco and Snuff: Manufactured in or imported into the United States and sold or removed for consumption or sale, per lb.	$ .18
Cigarette Papers and Tubes: Made up in or imported into the United States and sold to any person other than a manufacturer for the purpose of manufacture.	
Papers, for each package, book or set containing:	
Over 25 and not over 50 papers	$ .005
Over 50 and not over 100 papers	.01
Over 100, for each 50 papers or fraction thereof	.005
Tubes, for each 50 tubes or fraction thereof	.01
Cigarette manufacturers purchasing papers made up into tubes must give bond that they will use such tubes in the manufacture of cigarettes, or pay the tax imposed, as shown above. They must keep such records and render such returns as the Commissioner may prescribe in order to show the disposition of such tubes.	

PENALTY.—Every dealer in leaf tobacco:

(a) Who neglects or refuses to furnish the statement, to give bond, to keep books, to file inventory or to render the invoices, returns or reports required by the Commissioner, or to notify the collector of the district of additions to his places of storage; or

(b) Who ships or delivers leaf tobacco contrary to the regulations prescribed by the Commissioner; or

(c) Who fraudulently omits to account for tobacco purchased, received, sold, or shipped;

Shall be fined not less than $100 or more than $500, or imprisoned not more than 1 year or both.

A farmer or grower of tobacco or a tobacco growers' cooperative association is not regarded as a dealer in leaf tobacco in respect to the leaf tobacco produced by him or handled by such association. Such cooperative associations are required to keep records of all purchases and sales of tobacco, such records to be open to inspection by the agents of the government. The term "tobacco growers' cooperative association" is defined to mean an association of farmers or growers of tobacco organized and operated as sales agent for the purpose of marketing the tobacco produced by its members and turning back to them the proceeds of sales, less the necessary selling expenses, on the basis of quantity and quality of tobacco furnished by them.

SPECIAL TAXES

Title VII of the 1924 law imposes the following taxes which became effective July 1, 1924, unless otherwise stated, and are in lieu of the taxes imposed under Title X of the Revenue Act of 1921 which has been repealed:

	Tax
Automobiles, Passenger: Persons operating or renting passenger automobiles for hire—	
On each machine with seating capacity of over 2 and not over 7	$ 10.00
Over 7	20.00
Boats (See Yachts)	
Bowling Alleys and Billiard Rooms: To be paid by proprietor on each alley or table annually	10.00
Every building or place where bowls are thrown or where games of billiards or pool are played, except in private homes, shall be regarded as a bowling alley or a billiard room respectively.	
Brewers, Distillers, Wholesale and Retail Liquor Dealers, Wholesale and Retail Dealers in Malt Liquors, and Manufacturers of Stills, as defined in section 3244, as amended, and section 3247 of the Revised Statutes, carrying on such business in a state, territory, or district of the United States contrary to laws of such state, territory or district, or in any place therein in which the carrying on of such business is prohibited by local or municipal law, in addition to all other taxes, special or otherwise	1,000.00
Brokers:	
Custom House brokers, per annum	50.00
Pawn brokers, per annum	100.00
Ship brokers, per annum	50.00
Stockbrokers and Produce brokers, defined as persons engaged in business of purchasing or selling stocks, bonds, exchange, bullion, coined money, bank notes, promissory notes, other securities, produce or merchandise for others, per annum	50.00
Brokers who are members of a stock exchange, produce exchange, board of trade, or similar organization where produce or merchandise is sold, in addition, must pay, per annum:	
If the average value during preceding year ending June 30 of a seat or membership in such exchange or organization was $2.000 or over, but not over $5,000	100.00

	Tax
If such value was over $5,000 but not over $10,000	$150.00
If such value was over $10,000	250.00

Capital Stock Tax (See Federal Capital Stock Tax)

Cigar, Cigarette and Tobacco Manufacturers, per annum:

Cigars:	
Where annual sales do not exceed 50,000 cigars	4.00
Where annual sales exceed 50,000 and do not exceed 100,000 cigars	6.00
Where annual sales exceed 100,000 and do not exceed 200,000 cigars	12.00
Where annual sales exceed 200,000 and do not exceed 400,000 cigars	24.00
Where annual sales exceed 400,000 cigars	24.00
On excess over 400,000 cigars, in addition, per 1,000 cigars or fraction	.10
Cigarettes:	
On manufacturers of cigarettes, including small cigars, weighing not over 3 lbs. per 1,000; per 10,000 cigarettes or fraction thereof	.06
Tobacco:	
Where annual sales do not exceed 50,000 lbs	6.00
Where annual sales exceed 50,000 lbs. and do not exceed 100,000 lbs	12.00
Where annual sales exceed 100,000 lbs. and do not exceed 200,000 lbs	24.00
Where annual sales exceed 200,000 lbs	24.00
On excess over 200,000 lbs. in addition, per 1,000 lbs. or fraction	.16

In arriving at the amount of special tax to be paid, each person engaged in the manufacture of more than one of the classes of articles specified above is considered and deemed a manufacturer of each class separately. In computing the amount of annual sales no account is taken of tobacco, cigars, or cigarettes sold for export and in due course so exported.

Liquor Distillers (See Brewers)

Motor Boats (See Yachts)

Opium and Derivatives:

Importers, manufacturers, producers or compounders, per annum	24.00
Physicians, dentists, veterinary surgeons, and other practitioners lawfully entitled to distribute or administer any of the products listed in the course of their professional practice, per annum	3.00
Retail dealers, per annum	6.00
Wholesale dealers, per annum	12.00
On opium, coca leaves, any compound, salt, derivatives, or preparation thereof, produced in or imported into the United States and sold or removed for consumption or sale, per ounce or fraction	.01

Every person, on or before July 1st of each year, who imports, manufactures, produces, compounds, sells, deals in, dispenses, or gives away opium or coca leaves, or any compound, manu-

Tax

facture, salt, derivative, or preparation thereof, must register, with the collector of internal revenue of the district, his name or style, place of business and pay the tax. Persons at the time of engaging in any of such activities must immediately make like registration and pay the proportionate part of the tax for the period ending on the following June 30. This tax is imposed in addition to any import duty imposed on the aforesaid drugs.

Passenger Automobiles (See Automobiles)

Riding Academies: To be paid by proprietors, per annum..... $100.00

Every building, space, tent, or area, where a charge is made for instruction in horsemanship or for facilities for the practice of horsemanship is regarded as a riding academy. The tax is not collected from associations composed exclusively of members of units of the Federalized National Guard or the Organized Reserve and whose receipts are used exclusively for the benefit of such units.

Shooting Galleries: To be paid by proprietors, per annum..... 20.00

"Shooting Galleries" include every building, space, tent or area where a charge is made for the discharge of firearms, at any form of target.

Tobacco (See Cigars, etc.)

Yachts, Motor Boats, etc.: On the use of yachts, pleasure boats, power boats, sailing boats and motor boats with fixed engines, of over 5 net tons and over 32 feet in length, not used exclusively for trade, fishing or national defense or not built according to plans and specifications approved by the Navy Department, per annum:

Length over 32 feet and not more than 50 feet, per foot..... 1.00
Length over 50 feet and not over 100 feet, per foot..... 2.00
Length over 100 feet, per foot..... 4.00

The tax is due on July 1st of each year and also at the time of purchase of a new boat by a user on date other than July 1. In case of the original purchase of a new boat on a date other than July 1, the amount payable is the same number of twelfths of the amount of tax as number of calendar months (including month of sale) remaining prior to the following July 1. In determining length, measurements of over-all length shall govern. No tax is paid on vessels or boats used without profit by benevolent, charitable, or religious organizations, exclusively for furnishing aid, comfort, or relief to seamen.

TAX ON ADMISSIONS AND DUES

This tax is imposed under Title V of the Revenue Act of 1924, effective July 2, 1924, and supersedes the tax imposed by the Revenue Act of 1921.

Admissions

Tax

Admissions: Persons paying admissions (except where admission price is $.50 or less when no tax is due) per each $.10 or fraction thereof..... $.01

	Tax
An additional tax is levied on the amount paid for tickets to places of amusement, sold in excess of the regular price at places other than ticket offices of such amusements as follows:	
On the excess, if such excess is not over $.50	5%
On the excess, if such excess is over $.50	50%
Sold by proprietors or employees of such amusements for an amount in excess of regular price, on the excess	50%
Boxes or Seats: For permanent use, on the amount for which a similar box or seat is sold for each performance at which the box or seat is used or reserved	10%
Cabarets: Or similar entertainments to which the charge for admission is wholly or in part included in the price paid for refreshment, service, or merchandise; per each $.10 or fraction thereof	$.015
The amount paid for such admission is deemed to be 20% of amount paid for refreshment, service, and merchandise. Where the amount paid for admission is $.50 or less, no tax is imposed.	

ADMISSIONS EXEMPT FROM TAX.—No tax is levied on (1) any admissions, the proceeds of which, inure (a) exclusively to the benefit of religious, educational, or charitable institutions, societies, or organizations, societies for the prevention of cruelty to children or animals, or societies or organizations conducted for the sole purpose of maintaining symphony orchestra and receiving substantial support from voluntary contributions, or of improving any city, town, village, or other municipality, or of maintaining a cooperative or community center moving-picture theater, providing no part of the net earnings thereof inures to the benefit of any private stockholder or individual; or (b) exclusively to the benefit of persons in the military or naval forces of the United States; or (c) exclusively to the benefit of persons who have served in such forces and are in need; or (d) exclusively to the benefit of National Guard organizations, reserve officers' associations or organizations, posts or organizations of war veterans, or auxiliary units or societies of any such posts or organizations, if such posts, organizations, units or societies are organized in the United States or any of its possessions, and if no part of their net earnings inures to the benefit of any private stockholder or individual; or (e) exclusively to the benefit of members of the police or fire departments of any city, town, village, or other municipality, or dependents or heirs of such members; or (2) any admissions to agricultural fairs if no part of the net earnings thereof inures to the benefit of any stockholders or members of the association conducting the same, or admissions to any exhibit, entertainment, or other pay feature conducted by such association as part of any such fair, providing the proceeds therefrom are used exclusively for the improvement, maintenance and operation of such agricultural fairs.

Dues

	Tax
Dues or Membership Fees: In social, athletic, or sporting clubs, where the active resident annual dues are over $10 on amount thereof	10%
Assessments (excluding those for capital expenditures) are subject to the tax.	

INITIATION FEES.—Any amount paid as initiation fees to a social, athletic, or sporting club is subject to a 10% tax, if (1) such fees amount to

more than $10, or (2) the dues of an active resident member are in excess of $10 per year. The term "initiation fee" as defined by Article 10 of Regulations 43, Part II, issued under the Revenue Act of 1924, includes any payment to the club as a condition for membership, whether evidenced by a certificate of membership or a share of stock in the club or not. Thus, it includes amounts paid to such clubs or organizations for stock where the purchase of such stock is required as a prerequisite of membership. This applies only to stock purchased from the club or organization and not to amounts paid for stock purchased from retiring members, or other sources, or for purchases in excess of the requirement for membership.

If the land of a club is owned by a corporation organized for that purpose, and the purchase of stock in this corporation is required as a prerequisite to membership, the money paid for this stock is not taxable as an initiation fee.

Amounts paid for the purchase of a first mortgage bond secured by the club's property, though required as a prerequisite to membership, is not taxable as an initiation fee. The reason for this difference is that a share of stock represents an undivided interest in the corporation, while such a bond is an evidence of indebtedness.

The amount which is required to be deposited in a certain fund, known as a deposit fund, by each prospective member of the club, in order to gain membership therein, is taxable as an initiation fee.

LIFE MEMBERSHIPS.—Members are taxed annually at the same time and for a like amount as active resident annual members.

DUES EXEMPT FROM TAX.—Dues to a fraternal society, order, or association operating under the lodge system, are exempt from tax.

COLLECTION AND PAYMENT OF TAXES.—All persons receiving dues or fees and clubs and organizations having life members shall collect the taxes imposed, make monthly reports, and pay the taxes so collected to the collector in the district where such person, club or organization is located.

PENALTY.—If the tax is not paid when due, there shall be added as a part of the tax, interest at the rate of 1% a month from the time when the tax became due until paid.

STAMP TAXES

The present stamp taxes are imposed under Title VIII of the Revenue Act of 1924 which went into effect on July 2, 1924. This title is practically a reenactment of Title XI of the Revenue Act of 1921—

GENERAL EXEMPTIONS.—The following instruments are not subject to the stamp tax:

1. Bonds, notes, or other instruments issued by the United States or by any foreign government, or by any state, territory or the District of Columbia, or local subdivision thereof, or municipal or other corporation exercising the taxing power.
2. Bonds of indemnity required to be filed by any person to secure payment of any pension, allowance, allotment, relief, or insurance by the United States, or to secure a duplicate for, or the payment of, any bond, note, certificate of indebtedness, war-savings certificate, warrant or check, issued by the United States.
3. Stocks and bonds issued by co-operative building and loan associations which are organized and operated exclusively for the benefit of their

members and make loans only to their shareholders, or by mutual ditch or irrigation companies.

WHERE STAMPS MAY BE PROCURED.—Stamps are sold by collectors, deputy collectors of internal revenue and postmasters, and are also on sale at United States depositaries. Ordinary postage stamps cannot be used for the payment of any internal revenue taxes.

WHERE STAMPS ARE AFFIXED.—As a general rule, stamps are affixed to the document or instrument itself, but in some cases this rule does not prevail, as will be hereinafter illustrated.

WHO AFFIXES STAMPS.—The law contemplates that stamps shall be affixed by the person issuing the document or instrument but there is no inhibition against a person accepting or receiving any such document or instrument to affix the stamp if he is willing or has agreed to do so. It has been held that it makes no difference who affixes the stamp, as long as a stamp of the proper denomination is affixed to the instrument. Both parties to a taxable instrument are responsible to the Government for affixing and cancelling stamps in the required amount.

CANCELLATION OF STAMPS.—Stamps are cancelled by the person using or affixing the stamp, by writing or stamping thereon or causing to be written or stamped thereon in ink, his initials and the day, month, and year on which the stamp is used or affixed, or by cutting and cancelling the stamp with a machine or punch which will affix the initials and date as aforesaid and so deface the stamp as to render it unfit for reuse. In addition, stamps of the value of 50 cents or more are required to be cancelled by three parallel incisions made by some sharp instrument lengthwise through the stamp after the stamp has been attached to the instrument, except that this is not required where stamps are cancelled by perforation. The cancellation by either method should not so deface the stamp as to prevent its denomination and genuineness from being readily determined. The perforating machine may also imprint the initials and date or outline the same in small perforations, thus insuring complete cancellation, or the initials and date may be written on the stamp, and several perforations, sufficient to prevent washing and resale of the stamp may be made with an ordinary hand punch before fixing the stamp to the document. Where the initials of a person, firm or corporation have been perforated on the stamps before being used it is sufficient when the stamps are actually attached to the instrument to stamp the same with the full initials and date. Where the initials of a firm or company have been stamped or written on a stamp it is not required that the individual employee affixing the stamp shall also place his own initials thereon. It has been held that stamps on promissory notes were properly cancelled when they were so used and defaced that they could never be legally used again. In a suit upon a promissory note it was held that the failure to write the payee's initials on the stamp, when he was affixing the stamp and cancelling the same in the presence of the court before offering the note in evidence did not affect its sufficiency. A stamp affixed to an instrument and cancelled can not lawfully be removed and affixed to another instrument requiring a stamp. Amounts paid for stamps used in excess, or on instruments not actually effective and for which a substitute is prepared and stamped, or on instruments not subject to tax, may be refunded, upon claim properly presented to the collector.

The following documents and instruments, which are listed in alphabetical order, are subject to the stamp tax:

	Tax
Bonds, Debentures, or Certificates of Indebtedness issued by any person and all corporate securities issued with interest coupons or in registered form, on each $100 of face value or fraction thereof	$.05

The required stamps may be affixed either to the bonds or to the indenture under which the bonds were issued. If the stamps are affixed to the indenture, a statement to that effect must be made on the bonds.

Renewals are taxed as new issues and when a bond is conditioned for repayment of money in a penal sum greater than the debt secured, the tax shall be on the amount secured.

No tax is imposed upon the transfer of bonds, debentures or certificates of indebtedness from one holder to another.

Capital Stock, Original Issue:	
With par value, each $100 face value or fraction thereof	$.05
Without par value, actual value less than $100 per share, each $20 of actual value or fraction thereof	.01
Without par value, actual value $100 per share, each share	.05
Without par value, actual value over $100 per share, each $100 or fraction thereof	.05

The stamps are required by law to be attached to the stock books and not to the certificates.

Capital Stock and Rights to Subscribe, Sales and Transfers:	
With par value, each $100 face value or fraction thereof	$.02
Without par value, each share	.02

The stamps shall be affixed to (a) transfer books where shown only on books; (b) certificate where transfer is by certificate; (c) bill of sale where certificate is delivered in blank.

Certificates of Indebtedness (See Bonds, etc.)

Conveyances of Real Estate, by deed, instrument, or writing (not to secure debt) on consideration, less liens or encumbrances remaining thereon at time of sale:	
Exceeding $100, not in excess of $500	$.50
Each additional $500 or fraction thereof	.50

Debentures (See Bonds, etc.)

Deeds (See Conveyances)

Entry of Merchandise at Custom House—on value of merchandise:	
Not exceeding $100	$.25
Exceeding $100 and not exceeding $500	.50
Exceeding $500	1.00
Entry for withdrawal of merchandise from customs bonded warehouse	$ .50

Memorandum of Sale (See Produce)

Passage Ticket, one way or round trip transportation by vessels from U. S. to destination not in the U. S., Canada or Mexico:	
Not exceeding $30	$1.00
Exceeding $30 and not exceeding $60	3.00
Exceeding $60	5.00

No tax is imposed on tickets costing $10 or less.

Playing Cards, pack containing not over 54 cards..... $ .10

Policies of Insurance, Certificates, Binders or other instruments (except policies of reinsurance), charged on each dollar of premium or fraction thereof..... $ .03

The above applies to insurance made or renewed upon property within the United States, against peril by sea, or on land and inland waters or by fire, lightning, tornado, bombardment, etc., issued to a domestic corporation, partnership or individual resident of the United States by a foreign corporation, partnership or individual not a resident of the United States, when such policy or instrument is not signed or countersigned by an agent of the insurer within any State, Territory or district of the United States within which insurer is authorized to do business.

Power of Attorney, except for use in Government pensions or claims, back pay, bounty, or for property lost in Military or Naval service, or required in bankruptcy cases, or contained in applications of those who become members of or policy holders in mutual insurance companies doing business on the inter-insurance or reciprocal indemnity plan through an attorney in fact..... $ .25

Other powers of attorney not subject to tax are as follows:

(a) Warrant of attorney in a lease.
(b) Authorizing federal official to sell United States bonds in case of default.
(c) Authorizing officers of Federal Reserve Bank to assign United States bonds deposited as security.
(d) Authorizing a deputy to have access to safe.
(e) Contained in assignment for valuable consideration.
(f) Conferring no authority upon assignee not implied by the assignment.
(g) Assignment of insurance policies.
(h) To pay poll taxes.
(i) Power of sale.
(j) Authority to secretary of corporation to transfer stock.
(k) Pro forma power of attorney to transfer bonds or stock on books of corporation, printed on bond or stock certificate.
(l) Authorizing vendee of shares of stock to transfer same.
(m) Warrant of attorney in a judgment note.

Produce, Sales of, on exchange for future delivery, on each $100 in value or fraction thereof..... $ .01

So-called transferred or scratch sales are not subject to tax and this is also true of pass-outs. Sales for immediate delivery are not taxable and transfers of contracts to a clearing house for the purpose of adjusting accounts, provided no beneficial interest is passed to such clearing house, is not subject to tax.

Proxies, for election of officers or meeting for transaction of business of corporation, except for use in religious, educational, charitable, fraternal or literary societies or public cemeteries..... $ .10

Rights (See Capital Stock, Sales or Transfer)

Sales (See Capital Stock; Conveyances; Produce)

Transfers (See Capital Stock)

PENALTIES.—The law provides that whoever—

(a) Makes, signs, issues, or accepts, or causes to be made, signed, issued, or accepted, any instrument, document, or paper of any kind or description whatsoever without the full amount of tax thereon being duly paid;

(b) Manufactures or imports and sells, or offers for sale, or causes to be manufactured or imported and sold, or offered for sale, any playing cards, package, or other article without the full amount of tax being duly paid.

(c) Makes use of any adhesive stamp to denote any tax imposed by this title without cancelling or obliterating such stamps as hereinbefore outlined;

is guilty of a misdemeanor and upon conviction thereof shall pay a fine of not more than $100 for each offense.

The law also provides that whosoever

(a) Fraudulently cuts, tears, or removes from any vellum, parchment, paper, instrument, writing, package, or articles upon which any tax is imposed by this title, any adhesive stamp or the impression of any stamp, die, plate, or other article provided, made, or used in pursuance of this title;

(b) Fraudulently uses, joins, fixes, or places to, with, or upon any vellum, parchment, paper, instrument, writing, package, or article, upon which any tax is imposed by this title, (1) any adhesive stamp, or the impression of any stamp, die, plate, or other article, which has been cut, torn, or removed from any other vellum, parchment, paper, instrument, writing, package, or article, upon which any tax is imposed by this title; or (2) any adhesive stamp or the impression of any stamp, die, plate, or other article of insufficient value; or (3) any forged or counterfeited stamp, or the impression of any forged or counterfeited stamp, die, plate, or other article;

(c) Willfully removes, or alters the cancellation, or defacing marks of, or otherwise prepares, any adhesive stamp, with intent to use, or cause the same to be used, after it has been already used, or knowingly or wilifully buys, sells, offers for sale, or gives away, any such washed or restored stamp to any person for use, or knowingly uses the same;

(d) Knowingly and without lawful excuse (the burden of proof of such excuse being on the accused) has in possession any washed, restored, or altered stamp, which has been removed from any vellum, parchment, paper, instrument, writing, package, or article;

is guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than $1,000, or by imprisonment for not more than five years, or both, and any such reused, cancelled, or counterfeit stamp and the vellum, parchment, document, paper, package, or article upon which it is placed or impressed shall be forfeited to the United States.

REFUNDS.—Claims for the redemption of, or allowance for, stamps must be presented within 4 years after the purchase of such stamps from the government. Where taxes are paid pursuant to an assessment and not by the affixing of stamps, claims for refund must be presented within 4 years next after payment of such taxes.

SECTION 33

PURCHASE AND SALES TERMS

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SECTION 33

PURCHASE AND SALES TERMS

This section presents a brief description of the most generally used trade terms in American foreign and domestic business. Much of this discussion is based on the recommendations of the National Foreign Trade Council, which has issued a pamphlet on foreign trade definitions.

Shipping Quotations

NEED OF USING WELL DEFINED TERMS.—Manufacturers and exporters should make whatever quotations they employ so clear that there will be no possibility of misunderstanding or misinterpretation. Misunderstandings can best be avoided if the seller will formulate a **written statement of the general conditions** under which his sales are to be made, and will see that buyers possess these terms of sale when considering a quotation. The items which may be included in such a statement deal with: Delivery, delays, partial shipments, shipping instructions, inspection, claims, damage, and payment. If all contingencies are thus covered by carefully considered conditions of sale, disputes will largely be prevented.

The quotation "F. O. B. (named port)" as "F. O. B. New York," "F. O. B. New Orleans," "F. O. B. San Francisco," is often used by inland producers and distributors to mean merely delivery of the goods at railway terminal at the port named. This abbreviation originated as an export quotation and had no application to inland shipments. It was used only to mean delivery of the goods upon an overseas vessel at the port named. That, in fact, is the meaning universally given to the phrase among foreigners, and is the meaning which the best practice among exporters requires it invariably to have. But because of the confusion which has arisen through the use of that term with a different meaning, by inland producers and distributors, and in the interest of unmistakable clarity, American manufacturers and exporters should use the term "F. O. B. Vessel (named port)." It also avoids the difficulty which might arise among foreigners not always well versed in American geography, through confusing an inland forwarding point with a shipping port at seaboard.

CAPACITY OF BUYER TO TAKE DELIVERY.—When quoting "C. & F." or "C. I. F.", manufacturers and exporters moving large quantities of material by one vessel should be careful to ascertain in advance the buyer's capacity to take delivery. Under these terms and as a condition of making the freight rate, transportation companies may require a certain rate of discharge per day, and that rate of discharge might be in excess of the buyer's capacity to take delivery. In such event an adjustment with the transportation company would be necessary, which might affect the freight rate and consequently the price to be quoted.

EXPLANATIONS OF ABBREVIATIONS.—Following are abbreviations of shipping terms with their explanations:

F. O. B..... Free on board
F. A. S..... Free alongside
C. & F..... Cost and freight
C. I. F..... Cost, insurance and freight
L. C. L..... Less than carload lot

These definitions of export quotations are, in their order, the **normal situations** on which an export manufacturer or shipper may desire to quote prices. It is understood that unless a particular railroad is specified, the property will be delivered to the carrier most conveniently located to the shipper. If the buyer, for the purpose of delivery, or in order to obtain lower transportation charges, desires that the goods be delivered to a carrier further removed from the shipper and entailing a greater cost than delivery to the carrier most favorably situated, the carrier to which the buyer desires delivery of the goods should be named in the quotation.

F. O. B. (NAMED POINT).—When the price quoted applies only at inland shipping point and the seller merely undertakes to load the goods on or in cars or lighters furnished by the railroad company serving the industry, or most conveniently located to the industry, without other designation as to routing, the proper term is "F. O. B. (named point)." Under this quotation the **seller** must—

1. Place goods on or in cars or lighters.
2. Secure railroad bill of lading.
3. Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point, and clean bill of lading has been furnished by the railroad company.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Pay all transportation charges including taxes, if any.
3. Handle all subsequent movement of the goods.

In contracts of sales F. O. B. **acceptance** takes place at the F. O. B. point. The buyer is allowed a reasonable time from that point. **Quality and quantity** are essential elements of the contract of sale. In the absence of stipulations to the contrary, the buyer's check-up on these points is of the time when they are delivered to him.

F. O. B. (NAMED POINT) FREIGHT PREPAID TO (NAMED POINT ON THE SEABOARD).—This is the proper term to use when the seller quotes a price including transportation charges to the port of exportation without assuming responsibility for the goods after obtaining a clean bill of lading at point of origin. Under this quotation the **seller** must—

1. Place goods on or in cars or lighters.
2. Secure railroad bill of lading.
3. Pay freight to named port.
4. Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point, and clean bill of lading has been furnished by the railroad company.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Handle all subsequent movement of the goods.
3. Unload goods from cars.
4. Transport goods to vessels.
5. Pay all demurrage and/or storage charges.
6. Arrange for storage in warehouse or on wharf where necessary.

F. O. B. (NAMED POINT) FREIGHT ALLOWED TO (NAMED POINT ON THE SEABOARD).—This quotation should be used where the seller wishes to quote a price, from which the buyer may deduct the cost of transportation to a given point on seaboard, without seller being responsible for the goods after getting a clean bill of lading at point of origin. Under it the **seller** must—

1. Place goods on or in cars or lighters.
2. Secure railroad bill of lading.
3. Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point, and clean bill of lading has been furnished by the railroad company.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Pay all transportation charges (buyer is then entitled to deduct from amount of invoice freight paid from primary point to named port).
3. Handle all subsequent movement of the goods.
4. Unload goods from cars.
5. Transport goods to vessel.
6. Pay all demurrage and/or storage charges.
7. Arrange for storage in warehouse or on wharf where necessary.

F. O. B. CARS (NAMED POINT ON SEABOARD).—This term should be used when the seller may desire to quote a price covering the transportation of the goods to seaboard, assuming responsibility for loss and/or damage up to that point. Under this quotation the **seller** must—

1. Place goods on or in cars.
2. Secure railroad bill of lading.
3. Pay all freight charges from forwarding point to port on seaboard.
4. Be responsible for loss and/or damage until goods have arrived in or on cars at the named port.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Unload goods from cars.
3. Handle all subsequent movement of the goods.
4. Transport goods to vessel.
5. Pay all demurrage and/or storage charges.
6. Arrange for storage in warehouse or on wharf where necessary.

F. O. B. CARS (NAMED PORT) L. C. L.—This quotation should be used when the goods, on which a price is quoted covering transportation to the seaboard, constitutes less than a carload lot. Under it the **seller** must—

1. Deliver goods to the initial carrier.
2. Secure railroad bill of lading.
3. Pay all freight charges from forwarding point to port on seaboard.
4. Be responsible for loss and/or damage until goods have arrived on cars at the named port.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Handle all subsequent movement of the goods.
3. Accept goods from the carrier.
4. Transport goods to vessel.
5. Pay all storage charges.
6. Arrange for storage in warehouse or on wharf where necessary.

F. O. B. CARS (NAMED PORT) LIGHTERAGE FREE.—This quotation should be used when the seller wishes to quote a price which will include the expense of transportation of the goods by rail to the seaboard, including lighterage. Under this term the **seller** must—

1. Place goods on or in cars.
2. Secure railroad bill of lading.
3. Pay all transportaion charges to, including lighterage at, the port named.
4. Be responsible for loss and/or damage until goods have arrived on cars at the named port.

The **buyer** must—

1. Be responsible for loss and/or damage incurred thereafter.
2. Handle all subsequent movement of the goods.
3. Take out the insurance necessary to the safety of the goods after arrival on the cars.
4. Pay the cost of hoisting goods into vessel where weight of goods is too great for ship's tackle.
5. Pay all demurrage and other charges, except lighterage charges.

The **provision of lighterage** is only within the usual free lighterage limits of the port, and where lighterage outside such limits is required, it is for buyer's account.

F. O. B. VESSEL (NAMED PORT).—This term is used when the seller desires to quote a price covering expenses up to and including delivery of the goods upon the overseas vessel at a named port. Under it the **seller** must—

1. Meet all charges incurred in placing goods actually on board the vessel.
2. Provide the usual dock or ship's receipt.
3. Be responsible for all loss and/or damage until goods have been placed on board the vessel.

The **buyer** must—

1. Be responsible for loss and/or damage thereafter.
2. Handle all subsequent movement of the goods, charter ship, or reserve space on board vessel, designate vessel or steamship line.
3. Pay all transportation charges from the named port.

While the term F. O. B. in every country, except in America, means that the seller must deliver the goods on board the vessel, it is the general practice in America to specify such an obligation by adding the word "vessel." The simple term F. O. B. has a signification in America corresponding to F. O. R. (or F. O. T.) in Great Britain and "Franco sur Wagon" in most countries on the Continent of Europe. Further, under the term, "F. O. B. Vessel"—

1. The general law of contracts in this country allows rescission (by the seller) not simply for repudiation, but also because of the inability of the other party to perform, and for any breach of contract so material and substantial that it would be a defence to an action brought by the party in default under the contract.
2. The rights of the unpaid seller with regard to stoppage of goods *in transitu* are defined in the Sales Act.
3. Quality and quantity are essential elements of the contract of sale. In the absence of stipulations to the contrary, the buyer's check-up on these points is of the time when they are delivered to him.
4. Acceptance takes place at the F. O. B. point. The buyer is allowed a reasonable time from that point.
5. Regarding refusal of payment by the buyer, consult the Sales Act.

F. A. S. VESSEL (NAMED PORT).—This quotation is used when the seller desires to quote a price covering delivery of the goods alongside overseas vessel and within reach of its loading tackle. Under it the **seller** must—

1. Transport goods to seaboard.
2. Store goods in warehouse or on wharf if necessary, unless buyer's obligation includes provision of shipping facilities.
3. Place goods alongside vessel either in a lighter or on the wharf.
4. Provide the usual dock or ship's receipt.
5. Be responsible for loss and/or damage until goods have been delivered alongside the ship or on wharf.

The **buyer** must—

1. Be responsible for loss and/or damage thereafter, and for insurance.
2. Handle all subsequent movement of the goods, charter ship or reserve space on board vessel, designate vessel or steamship line.
3. Pay cost of hoisting goods into vessel where weight of goods is too great for ship's tackle.

In selling "F. A. S. Vessel" manufacturers and exporters should be careful to have their agreements with buyers cover explicitly the question of responsibility for loss after goods have been delivered on the wharf or alongside the vessel and before they are actually loaded on the ship. There is no generally established practice on this point.

C. & F. (NAMED FOREIGN PORT).—This term is employed when the seller is ready to go farther than the delivery of his goods upon the overseas vessel and is willing to pay transportation to a foreign point of delivery. Under this quotation the **seller** must—

1. Make freight contract and pay transportation charges sufficient to carry goods to agreed destination.
2. Deliver to buyer or his agent clean bills of lading to the agreed destination.
3. Be responsible for loss and/or damage until goods have been delivered alongside the ship and clean ocean bill of lading obtained (seller is not responsible for delivery of goods at destination).

The **buyer** must—

1. Be responsible for loss and/or damage thereafter and must take out all necessary insurance.
2. Handle all subsequent movement of the goods.
3. Take delivery and pay costs of discharge, lighterage and landing at foreign port of destination in accordance with bill of lading clauses.
4. Pay foreign customs duties and wharfage charges.

C. I. F. (NAMED FOREIGN PORT).—This term is used when seller desires to quote a price covering cost of the goods, marine insurance on them, and transportation charges to foreign point of delivery. Under it the **seller** must—

1. Make freight contract and pay freight charges sufficient to carry goods to agreed destination.
2. Take out and pay for necessary marine insurance.
3. Deliver to buyer or his agent clean bills of lading to the agreed destination, and insurance policy and/or negotiable insurance certificate.
4. Be responsible for loss and/or damage until goods have been delivered alongside the ship, and clean ocean bill of lading and insurance policy and/or negotiable insurance certificate have been delivered to the

buyer, or his agent. (Seller is not responsible for the delivery of goods at destination, nor for payment by the underwriters of insurance claims.)

5. Provide war risk insurance, where necessary, for buyer's account.

The **buyer** must—

1. Be responsible for loss and/or damage thereafter, and must make all claims to which he may be entitled under the insurance directly on the underwriters.
2. Take delivery and pay costs of discharge, lighterage and landing at foreign port of destination in accordance with bill of lading clauses.
3. Pay foreign customs duties and wharfage charges.

The quotation C. I. F. signifies that:

1. If the seller has failed to insure the goods—
   (a) The buyer is entitled to take out insurance himself and to subtract the cost thereof from the amount of the invoice.
   (b) In certain cases the buyer can cancel the sale and claim damages.
2. The unpaid seller is entitled to certain remedies specified in the Sales Act.
3. Acceptance takes place at agreed destination point. The buyer is allowed a reasonable time from that point.
4. Quality and quantity are essential elements of the contract of sale. In the absence of stipulations to the contrary the buyer's check-up on these points is of the time when they are delivered to him.
5. Regarding refusal of payment by the buyer, consult the Sales Act.

Fees for consular invoices and similar items are arbitrary charges fixed by foreign governments, and are not included in the terms of C. & F. or C. I. F. quotations, and it is part of the duty of the buyer to meet them.

VARIATIONS OF ABBREVIATIONS.—There are, in more or less common use by manufacturers in different parts of the United States, numerous variations of the abbreviations, practically all of which are employed to convey meanings substantially synonymous with those defined above. For instance, there are manufacturers who quote "F. O. B. Cars," "F. O. B. Works," "F. O. B. Mill" or "F. O. B. Factory" meaning that the seller and buyer have the same responsibilities as those set forth in "F. O. B. (named point)," as "F. O. B. Detroit," "F. O. B. Pittsburgh," etc. Of the great number of abbreviations used in the United States, the form "F. O. B. (named point)" is most widely used and understood, and therefore should be adopted as the standard of practice.

AMERICAN TERMS AND FOREIGN EQUIVALENTS.—

American Term	British Term	Equivalent on Continent of Europe
F. O. B. Vessel	F. O. B.	F. O. B.
F. A. S. Vessel	F. A. S.	F. A. S., ou Franco le long du navire
F. O. B.	F. O. R. (Free on Rail) or F. O. T. (Free on Truck)	Franco sur Wagon
(Not used in U. S. A.)	Free delivered	Franco rendu
C. I. F.	C. I. F.	C. I. F. ou C. A. F. (Coût, Assurance, Fret)
C. & F.	C. & F.	C. et F. (Coût et Fret)

TRADE TERMS IN LEADING COMMERCIAL COUNTRIES.—The International Chamber of Commerce has adopted definitions of various trade terms most generally used in the leading commercial nations and which are set forth in the following comparative digest:

"F. O. B. (named port)"—or, in United States of America, "F. O. B. vessel (named port)"

QUESTION	United States of America	Belgium	Chile	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
A. Must the Seller:												
1. Be responsible for and pay the transportation of the goods to the named port?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Be responsible for the loading of the goods on board the ship and cover the expenses of same?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*Yes* [1]	Yes	Yes	Yes
a. Are the costs of stowing also to be borne by the seller or the buyer?	Buyer	*Ship* [2]		*Buyer* [3]	*Ship* [2]	Buyer	*Note* [4]	*Ship* [3]	*Ship* [2]	*Buyer* [3]	*Ship* [2]	*Buyer* [3]
b. Are harbour dues payable by the seller or the buyer?	*Buyer* [3]	Ship		Seller	Ship	Seller	Buyer	Buyer	Ship	Ship	Ship	Seller
c. Are other ship's dues payable by the seller or the buyer?	*Buyer* [3]	Ship		*Buyer* [3]	Ship	Seller	Buyer	Buyer	*Note* [5]	Ship	Buyer	Buyer
d. Are clearance dues and other analogous dues connected with the goods payable by the seller or the buyer?	*Note* [6]	*Note* [7]		*Note* [8]	Seller	Seller	Seller	Buyer	Seller	*Note* [8]	Seller	*Note* [8]
3. Provide the usual bill of lading?	*Note* [9]	*Note* [10]	Yes	Yes	Yes	*Note* [11]	Yes	Yes	Yes	Yes	Yes	Yes
4. Be responsible for all loss and/or damage which may occur until the goods have been placed on board the vessel?	Yes	Yes	Yes	Yes	Yes	Yes	*Yes* [12]	Yes	*Yes* [1]	Yes	Yes	Yes
B. Must the Buyer:												
1. Charter a ship or reserve the necessary space on board a vessel?	Yes	Yes	Yes	*Yes* [13]	Yes	*Note* [14]	Yes	*Yes* [15]	Yes	*Yes* [16]	Yes	Yes
2. Inform the seller as to the date on which the ship will be ready, so that the seller may be in a position to load the goods within the period provided for in the contract?	Yes	Yes		Yes	Yes	*Note* [14]	*Yes* [12]	Yes	Yes	Yes	Yes	Yes
3. Be responsible for all loss and/or damage which may occur from the time that the goods are placed on board the vessel?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*Yes* [1]	Yes	Yes	Yes
4. Effect payment against documents (bill of lading and invoice), unless provided otherwise?		*Note* [17]		Yes	*Note* [17]	Yes	Yes	Yes		Yes	*Note* [17]	Yes

1. * * *
2. Unless otherwise provided, the costs of stowing are included in the freight.
3. Subject, however, to the practice of the port of embarkation.
4. Reference should be made to the practice of the various ports
* * *
5. In the Netherlands no general provision exists on this point.
11. The seller must declare the goods to the Customs; all dues collected up to the moment of loading on board are paid by the seller.
12. In cases of sale of a *genus* the transfer of responsibility takes place at the moment of the individualization of the goods.
13. The seller may also be required to reserve the necessary space on board a vessel.

6. * * *
7. There are no export duties.
8. Generally speaking, these dues are for seller's account if they are collected before the loading of the goods; otherwise they are for buyer's account.
9. The seller must provide the usual dock or ship's receipt.
10. The seller may, instead of the bill of lading, furnish the receipt for delivery on board or the M/R (*Mate's Receipt*). The buyer must have the bill of lading drawn up and must pay the freight, if it is payable in advance.
14. Generally speaking, the seller would reserve space on board the vessel.
15. In the case of ports which are ports of call of regular steamship lines the seller must reserve the necessary freight.
16. In the case of "parcels," it is the seller who reserves the necessary space on board the ship.
17. The buyer must pay according to the provisions of the legislation of the country.

"F. O. B. (named port)"—or, in United States of America, "F. O. B. vessel (named port)"—(Continued)

QUESTION	United States of America	Belgium	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
C. Does the term F. O. B. further signify that:											
1. The seller can prevent the goods from being delivered on arrival to the buyer otherwise than against payment or presentation of receipt?	*Yes* [1]		Yes		Yes	Yes	No	*Note* [2]	Yes		Yes
2. The seller can in case of non-payment, or if payment is overdue, cancel the sale?	*Yes* [1]		Yes		Yes	*Yes* [3]	Yes	*Note* [2]	Yes		Yes
3. The seller has the right to forbid delivery of the goods to the buyer if the seller has become bankrupt or suspended his payments (stoppage *in transitu*), unless the buyer has effected the payment in advance or provided sufficient guarantee?	*Yes* [1]		Yes		Yes	Yes	Yes	*Note* [2]	Yes		*Yes* [4]
4. The quality of the goods, as stipulated in the contract shall be determined according to their condition at the time of loading; unless provided otherwise, the same holds for the quantity?	*Yes* [1]		Yes	Yes	Yes	Yes	Yes	*Yes* [2]	Yes		Yes
5. The period for making claims with reference to quality or quantity commences from the day of the arrival of the goods?	*No* [5]		*Yes* [6]		Yes	Yes	Yes	*Note* [2]	Yes		Yes
6. The buyer is not entitled, on presentation of documents, to refuse payment or to refuse to accept a draft, if such mode of payment has been agreed upon, on the ground that the goods have not arrived or that he has not yet been able to examine them or even that the goods have been lost or damaged?	*Yes* [1]		Yes		Yes	Yes	Yes	Yes	Yes		Yes

1. * * *
2. * * *
3. The seller may cancel the sale or cause the goods to be sold.
4. * * *
5. The period for making claims commences from the date of loading on board.
6. The period for making claims commences from the day on which the goods are at the disposal of the buyer at the point of destination.

In Europe—"F. O. R. (named departure point)" = (Free on Rail); "F. O. T. (named departure point)" = (Free on Truck); "Franco Sur Wagon (named departure point)" In U. S. A.—"F. O. B. (named departure point inland)"

QUESTION	United States of America	Belgium	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
A. Must the seller:											
1. Secure railway waggon?	Yes	Yes	Yes	Yes	Yes	Yes	*Yes* [1]	*No* [2]	*No* [3]	Yes	Yes
2. Load goods on waggon within the period fixed?	*Yes* [4]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*Yes* [5]	Yes	Yes
3. Be responsible for loss and/or damage up to the time that loading is completed?	Yes	Yes	Yes	Yes	Yes	*Yes* [6]	Yes	Yes	Yes	Yes	Yes
B. Must the buyer:											
1. Be responsible for loss and/or damage incurred thereafter?	Yes	Yes	Yes	Yes	Yes	*Yes* [6]	Yes	Yes	Yes	Yes	Yes
2. Pay for transport charges from named departure point?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Unless provided otherwise, effect payment against invoice and way-bill, if, according to either of these documents the right to dispose of the goods is transferred to the buyer?	Yes		Yes		Yes	Yes	Yes		Yes		Yes
C. Does this term, further, signify that:											
1. As the buyer is not bound to examine the goods before they are placed at his disposal at the destination point, the period for making a claim with reference to quality or quantity only commences then? (Nevertheless, this provision can be modified by agreement between the two parties or by commercial custom.)	*No* [7]		Yes	Yes	Yes	Yes	Yes	*Note* [8]	Yes		Yes
2. The quality of the goods as stipulated in the contract must be determined according to their condition at the time when the loading on waggon is finished; same provision holds as regards quantity?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
3. The seller has the right to forbid delivery of the goods to the buyer if the buyer has become bankrupt or suspended his payments (stoppage *in transitu*)?	*Yes* [7]		Yes		*Note* [9]	Yes	Yes	*Note* [8]	Yes		Yes

1. Yes, in cases where there is a regular service of trains.
2. The buyer must procure a waggon.
3. The seller must *order* a waggon for buyer's account.
4. Nothing is laid down with regard to the period for making claims.
5. But the seller is not responsible in cases where he cannot procure a waggon within the stipulated period; in such cases the buyer is not entitled to cancel the order.
6. In cases of sale of a *genus* the transfer of the responsibility takes place at the moment of the individualization of the goods.
7. * * *
8. * * *
9. When the seller has once placed the goods at the disposal of the buyer, so that the buyer has control of them, the title to the goods has passed to buyer; and in consequence the goods cannot be recovered by the seller (even if the goods have been lost or delayed in transit). The goods then become the property of the Receiver in bankruptcy.

N. B.—In Italy and Scandinavian countries, this clause is practically only used where consignments in complete waggons are concerned. Where parcels are concerned, the signification of the clause is the same excepting that the seller is not bound to secure a waggon or to load the goods. He simply hands over the goods to the railway company and the buyer thereby becomes responsible for them. In this case, the seller frequently uses the "term at the buyer's risk."

"Free Delivered (named destination point)"—"Franco Rendu (named destination point)"

QUESTION	United States of America (*see Note* 1)	Belgium	Denmark	France	Great Britain	Italy	Japan	Netherlands (*see Note* 2)	Norway	Spain	Sweden
A. Must the seller:											
1. Be responsible for the despatch of the goods to agreed destination and pay all charges?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*Note* 3	Yes
2. Deliver the goods or hold them at the disposal of the buyer at the destination point within the time stipulated in the contract?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Be responsible for loss and/or damage up to the time when the goods are delivered to the buyer through the transporting company?		Yes	Yes	Yes	Yes	*Yes* 4	Yes	Yes	Yes	Yes	Yes
B. Must the buyer:											
1. Be responsible for loss and/or damage incurred thereafter?		Yes	Yes	Yes	Yes	*Yes* 4	Yes	Yes	Yes	Yes	Yes
2. Pay the transport charges not paid by the seller the said charges being subsequently deducted from the amount of the invoice?			Yes	No	No	Yes	Yes	*Note* 5	No	Yes	Yes
3. Pay the unloading charges?		Yes		No	*Note* 6	Yes	Yes	Yes	No	Yes	Yes
4. Pay all import and entrance duties?			*Note* 7	*Note* 8	Yes	Yes	Yes	*Note* 9	Yes	*Note* 10	*Yes* 11
C. Does this term, further, signify that:											
1. The quality of the goods as stipulated in the contract must be judged according to their state at the time of arrival; the same provision holds as regards quantity?			Yes	Yes	Yes	*Yes* 12	Yes	Yes	Yes		Yes
2. Unless provided otherwise, the buyer is not bound to pay for the goods against the bill of lading or way-bill, but payment for same can only be demanded against delivery of the goods?			Yes		No	Yes	Yes	*Note* 13	Yes		Yes
3. The seller has a right to forbid delivery of the goods to the buyer if the buyer has become bankrupt or suspended his payments (stoppage *in transitu*)?			Yes		*Note* 14	Yes	Yes	*Note* 13	Yes		Yes

1. This term is not currently used in the United States.
2. The Dutch term is "Free on truck (or ship) delivered (named destination point)."
3. The seller has the option of insuring the goods or not, and of undertaking the risk of despatch.
4. In cases of sale of a *genus* the transfer of the responsibility takes place at the moment of the individualization of the goods.
5. There is no general rule.
6. This is entirely a matter of arrangement.
7. There is no rule; generally speaking Customs dues are considered as being for buyer's account.
8. The seller must pay national import duties and the buyer the local duties.
9. The buyer must pay import duties payable after the completion of transportation.
10. In order to ensure that the seller is obliged to undertake payment of Customs dues, the word "dédouané" (passed through Customs) should be added.
11. * * *
12. * * *
13. * * *
14. The seller has the right to withold the delivery of the goods as long as the bill of lading or way-bill has not passed into the possession of the buyer.

C. I. F. or C. A. F. (cost, insurance, freight)

QUESTION	United States of America	Belgium	Chile	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
A. Must the seller:												
1. Ship the goods at his own expense to agreed destination point?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Pay export and exit duties and all other duties of the same kind at the port of embarkation and during the voyage?	*Note* [1]	Yes		Yes	Yes	Yes	Yes	Yes	Yes	*Note* [2]	*Note* [3]	Yes
3. Take out and pay all necessary and usual marine insurance?	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]	*Yes* [4]
4. Hand over to the buyer or to any of his representatives, a clean bill of lading for agreed destination, a marine insurance policy, a negotiable insurance certificate, and a certificate of origin if the Customs regulations of the receiving country require it?	*Yes* [5]	Yes	Yes	Yes	Yes	*Yes* [6]	Yes	Yes	Yes	Yes	Yes	Yes
5. Be responsible for loss and/or damage, up to the time the goods are loaded on board the vessel?	*Note* [7]	Yes	Yes	*Note* [8]	Yes	*Note* [9]	*Yes* [10]	Yes	Yes	*Note* [8]	Yes	*Note* [8]
B. Must the buyer:												
1. Be responsible for loss and/or damage incurred thereafter (the buyer is responsible for making all claims before the underwriter or underwriters)?	Yes	Yes	*Yes* [11]	Yes	Yes	Yes	*Yes* [10]	Yes	Yes	Yes	Yes	Yes
2. Take delivery of the goods and pay the charges for unloading, lighterage and landing at port, in accordance with the bill of lading clauses?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Pay all foreign import taxes, customs duties and wharfage charges?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. Unless provided otherwise, make the payment against bill of lading, insurance policy and invoice?		*Note* [12]		Yes	*Note* [12]	Yes	Yes	Yes	Yes	Yes		Yes
5. Pay the freight not paid by the seller, the said freight being subsequently deducted from the amount of the invoice? (This obligation falls upon the buyer even if the payment is due only at a future date. The buyer is not entitled to any interest on such a payment.)	Yes	*Yes* [11]		Yes		No	Yes	Yes	Yes	Yes		Yes

1. There are no export duties in the United States. Consequently there is no general practice on this point. However consular fees and other special dues are considered as being for buyer's account.
2. The seller must pay export and similar duties if they are collected *before* loading; but not otherwise.
3. * * *
4. * * *
5. However it is taken for granted that the seller will take reasonable care to provide, *at buyer's expense*, consular invoice and certificates of origin and such other foreign government requirements as are specifically covered in instructions from the buyer.
6. No general provision exists as regards certificate of origin.
7. The seller is responsible up to the point the goods are delivered alongside ship.
8. The seller is responsible until the completion up to the despatch of the goods.
9. The seller is responsible up to the handing of the goods over to the care of the shipowner.
10. In cases of sale of a *genus* the transfer of the responsibility takes place at the moment of the individualization of the goods.
11. If required the seller should assist the buyer in making claim.
12. The buyer must pay according to the provisions of the legislation of the country.
13. Provided that this freight has been deducted from the total of the invoice.

C. I. F. or C. A. F. (cost, insurance, freight)—(Continued)

QUESTION	United States of America	Belgium	Chile	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
C. Does the term C.I.F. further signify that:												
1. If the seller has failed to insure the goods:												
a. The buyer is entitled to damages for any prejudice caused him by this fact?	Yes	Yes		Yes	Yes	*Note* [1]	Yes	Yes	*Note* [2]	Yes	Yes	Yes
b. The buyer is entitled to take out insurance himself and to subtract the cost thereof from the amount of the invoice?	Yes	Yes		Yes	Yes	*Note* [1]	Yes	Yes	*Note* [2]	Yes	Yes	Yes
c. In certain cases, the buyer can cancel the sale and claim damages?	Yes			Yes	Yes	*Note* [1]	Yes	Yes	*Note* [2]	Yes	Yes	Yes
2. The seller is entitled to:												
a. Prevent the goods on arrival from being delivered to the buyer except against payment?	*Note* [3]			Yes		*Yes* [4]	Yes	Yes	*Note* [2]	Yes		Yes
b. Cancel the sale and claim damages in case of non-payment or if the payment is overdue?	*Note* [3]			Yes		*Yes* [4]	Yes	Yes	*Note* [2]	Yes		Yes
c. Prevent the goods from being delivered to the buyer if the buyer has become bankrupt or has suspended his payments (stoppage *in transitu*)?	*Note* [3]			Yes		*Yes* [4]	Yes	Yes	*Note* [2]	Yes		Yes

C. I. F. or C. A. F. (cost, insurance, freight)—(Continued)

QUESTION	United States of America	Belgium	Chile	Denmark	France	Great Britain	Italy	Japan	Netherlands	Norway	Spain	Sweden
C—(Continued)												
3. As the buyer is not bound to examine the goods before their arrival at destination point the period for making claims with reference to quality and quantity commences then?	Yes			Yes	Yes	*Yes* [5]	Yes	Yes	*Note* [2]	Yes		Yes
4. The quality of goods as stipulated in the contract must be determined according to their condition at the time of loading, unless provided otherwise; (the same provision holds good as regards the quantity)?	Yes	Yes		Yes	Yes	*Note* [6]	Yes	Yes	*Note* [2]	Yes		Yes
5. When goods have been sold C. I. F. the provision regarding the time for delivery in the contract, unless provided otherwise, refers to the date of despatch of the goods and not to that of their arrival?	*Note* [3]	Yes		Yes	Yes	Yes	Yes	Yes	*Note* [2]	Yes	Yes	Yes
6. Upon presentation of the documents the buyer is not entitled to refuse payment or to refuse to accept a bill, if this mode of payment has been agreed to, on the ground that the goods have not yet arrived or that he has not been able to examine them or even that the goods are lost or damaged?	*Yes* [3]	*Yes* [7]		Yes		Yes	Yes	Yes	*Note* [2]	Yes	Yes	Yes

1. The seller must comply with the *Sales of Goods Act*, Section 32 (3).
2. * * *
3. * * *
4. Provided that the bill of lading has not already been handed over to the buyer or his agent.
5. Provided no agreement has been made to examine the goods before despatch.
6. There will be no inspection unless specially stipulated for in the contract.
7. Provided that the "date of despatch" means the date of loading on board the ship, and provided also that the seller has taken the usual precautions in the choice of the ship.

Trade Discounts and Terms of Payment

TRADE DISCOUNTS.—Because of changing market prices trade discounts are given on **"list" (base) prices,** thereby avoiding a frequent revision and publication of catalogs, etc. As the market price decreases the trade discount is increased, and vice versa. The discount terms, which are written on the invoices, may be a single discount (as, less 25%) or a series of discounts sometimes called **"chain" discounts,** as, less 20%, 10% and 5%.

Example: A list price of $800 with discount of 20%, 10% and 5%.

List price	$800.00
Less 20% of $800	160.00
	$640.00
Less 10% of $640	64.00
	$576.00
Less 5% of $576	28.80
Sales price	$547.20

A series of discounts are equal to a certain single discount, e.g.:

List price	100.0%	
20% of 100	20.0	20.0%
	80.0%	
10% of 80	8.0	8.0
	72.0%	
5% of 72	3.6	3.6
	68.4%	31.6%

20%, 10% and 5% = 31.6%
31.6% of $800.00 = $252.80 discount
$800.00—$252.80 = $547.20 sales price
or 68.4% of $800.00 = $547.20 sales price

TERMS OF PAYMENT.—To suit the activity of the various commodities and other modifying circumstances attending the different lines of trade there have arisen several terms of payment.

C. B. D.—Cash Before Delivery.—When the seller does not wish to take any credit risk and will not assume the risk of having the buyer refuse the goods after they have been shipped, he sells on these terms.

C. O. D.—Cash on Delivery.—The seller who wants to avoid a credit risk sells C. O. D. Sometimes he requires a **deposit** to cover any probable losses of transportation, handling expenses, damages and deterioration should the buyer not accept the goods upon arrival.

R. O. G.—Receipt of Goods.—The time consumed in transportation varies greatly between nearby and distant buyers, particularly in certain trades. In order to equalize their terms of payment sometimes the seller makes the time allowed for taking discount begin at the time the goods are received by the buyer.

Instalment Plan.—Certain slow-moving and high-priced goods, such as furniture, books and agricultural machinery, are sold on the instalment plan. The **title** remains with the seller until the last instalment is paid. Bankers are wary of financing a seller on this plan because of so many defaults of payment and goods returned.

Season Dating.—In many lines of seasonal business the seller may date the purchase order several months ahead or allow a considerable amount of time to elapse before the beginning of the discount period. This is to induce the buyer to place his order ahead and let it be shipped out, thereby relieving the rush period, and gaining advance information as to quantity of importation or manufacture.

Cash Discounts.—The following are typical terms of cash discount:

1% 10d.—1% discount if paid in 10 days.
Net 30d.—Pay net within 30 days.
2% 10th proximo—2% discount if paid by the 10th of the following month.
5% e.o.m.—5% discount if paid by the end of the month.
60d. extra—Amounts to **dating** the bill 60 days ahead, e.g.: A bill dated June 1 is due or the discount period begins August 1.

There may be a combination of some of the above terms as:

2% 10d. net 60d.—2% if paid in 10 days or net if paid from 11 to 60 days.
1% 10d. net 30d. 60d. extra—1% if paid between the 60th and 70th day after date of bill, net if paid from the 71st to the 100th day, and if paid prior to the 60th day, deduct 1% and interest on the net amount from the time of payment to the 60th day.

When bills are paid after the discount period the buyer loses the discount in theory, but in practice it is not always true. Sometimes the discount is allowed but interest is charged at 6% for the time overdue. Some houses require the buyer to lose 1% discount for each month overdue. Where extra terms are given, the seller usually allows 8% deducted from the gross amount if paid within 10 days from date.

TERMS OF SALE OF VARIOUS TRADES.—The terms of cash discount allowed in various trades are set forth in the accompanying tabulation which appears in the Credit Men's Diary and Manual of Commercial Laws for 1924, published by the National Association of Credit Men, and which was prepared from material compiled by W. H. Steiner of the Statistical Department of the Federal Reserve Board.

Terms of Sale

(When commodities appear in more than one column, numbers in parentheses are added. Thus, for example, zinc appears in column 1 with the notation (2) after it, showing that it also appears in column 2.)

½% 10d.	½% 10d. Net 30d.	1% 10d.	1% 10d. Net 30d.	1% 10d. Net 30d. (Cont.)	1% 10d. Net 60d.	1% 10d. 60d. Extra	1% 15d. Net 30d.
1	2	3	4	4a	5	6	7
1. Bacon (2) 2. Hams (2) 3. Zinc (high grade) (usual terms) (2)	1. Anthracite Coal (certain cases) 2. Bacon (1) 3. Bars (sheet) 4. Coffee (green) (small jobbers) (14) (16) 5. Ham (1) 6. Ingots 7. Rails (light) 8. Rivets (½" and larger) 9. Rods (wire) 10. Spices (4a) (14a) (whole) 11. Zinc (high-grade) (terms for purchasers of high standing) (1)	1. Brick (face) (11) (41) 2. China 3. Gasoline 4. Glove Leather (12) (14) (24) (26) (28) (31) (33) 5. Hosiery (general) (12) (13) (15) (16) (33) (43) 6. Kerosene (Mid. Atl. States) 7. Lumber (11) (18) (20) 8. Overalls (11) 9. Pottery (12a) 10. Shirts (working) (11) (15) 11. Shoes (New England) (12a) (14a) (24) (33) 12. Spools 13. Yarn (10) (11)	1. Bolts, rivets, nuts (less than ½") 2. Bottles 3. Boxes 4. Brass, copper, rods, wire sheeting, tubing 5. Chemicals and drugs (medical and technical) (5) (8) (14) (23) (11) 6. Cigars (imported) (5) 7. Drugs (crude) (same as 5) 8. Flour (used in rare cases) (10) 9. Glass (plate, window) (7) (8) 10. Groceries (gen. items) (whole.) (5)	11. Ketchup, etc. (12) 12. Lead (chemical sheet) 13. Lead pipe (chemical) 14. Oils (5) (12) 15. Paints (14a) (12a) 16. Peanut butter 17. Preserves (5) (9) 18. Sauces (9) (12a) 19. Shipping containers (shooks) (14) 20. Spices (2) (14a) 21. Underwear (knit) (whole. and retail) (5) (6) (15) (16) (18) (48) (51) 22. Varnishes (14a)	1. Cigars (domestic) (4) 2. Drugs and chemicals (4) (8) (11) (14) (23) 3. Groceries (canned gds.) (4) 4. Medicine (all mixed orders) 5. Oils (branded) (carload or less) (4a) (12) 6. Preserves (4a) (9) 7. Soups (canned) (9) 8. Underwear (heavy-weight.) (whole. and retail) (4a) (6) (15) (16) (18) (48) (51)	1. Underwear (light-wght.) (whole. and retail) (4a) (5) (15) (16) (18) (48) (51)	1. Glass (flint and lime) (4) (8)

Terms of Sale—(Continued)

1% 30d. Net 60d.	1½% 10d. Net 30d.	1½% 10d. Net 60d.	2% 10d.	2% 10d. Net 30d.	2% 10d. Net 30d. (Cont.)	2% 10d. 30d. Extra	2% 10d. Net 60d.
8	9	10	11	12	12a	13	14
1. Blanks (for cut glass) 2. Chemicals (Pacific Coast) (4) (5) (11) (14) (23) 3. Cultivators (wheel) 4. Cut glass (7) (4) 5. Lever and disc harrow	1. Beans 2. Chili con carne 3. Clams (minced) (Pacific Coast) 4. Fish (canned) 5. Preserves (4a) (5) 6. Sauces (4a) (12a) 7. Soups (canned) (5)	1. Canned goods (general) (Maine and Colorado) 2. Flour (used extensively) (4) 3. Sardines (Maine) 4. Yarn and thread (rare instances) (3) (11)	1. Brick (face) (3) (41) 2. Drugs (general) (4) (5) (8) (14) (23) 3. Furs (cheap grade) (depending on season) (49) 4. Lumber (wholesale) (3) (18) (20) 5. Overalls (3) 6. Shirts (work) (3) (15) 7. Spools and thread (10) 8. Waists (women's) (cheap grade) 9. Yarn (3) (10)	1. Auto access. (w'ly used) 2. Coat leath. 3. Coats and suits (33) 4. Corsets (local trading) (14) (33) (36) (49) 5. Druggists' sundries 6. Elec. sup. (gen. cons.) 7. Hats (Panama) (33) 8. Hosiery ret. (very extensively used) (3) (13) (15) (16) (33) (43) 9. Ketchup, etc. (4a) 10. Leather (fancy gds.) (rust. collar) (coat) (3) (14) (24) (33) (28) (26) (31) 11. Linseed oil (4a) (5) 12. Mill suppl. 13. Mus. instr. 14. Office appl. (14a)	15. Paints (4a) (dry) (14a) 16. Paints and varnishes (4a) (14a) 17. Paper a. book (publishers) b. printing (fine grade) c. towel and toilet d. waxed (cash discount largely used and net terms unusual) (18) (26) 18. Pottery (3) 19. Preserves 20. Sauces (4a) (9) 21. Saws 22. Silverware (sterling) 23. Shoes (to retailers) (3) (14a) (24) (33) 24. Stationery (whole.) (14a) 25. Phonographs 26. Tin plate 27. Tubes (seamless) (14a)	1. Hosiery (heavy woolen) (3) (12) (15) (16) (33) (43) 2. Coffee (roasted) (2) (14) (16) 3. Nightwear (15) (24)	1. Bale goods 2. Candy (bulk) 3. Cigarettes 4. Coffee (roasted) (in West) (2) (16) (13) 5. Containers (shipping) (shooks) (4a) 6. Corsets (Pacific Coast) (12) (33) (36) (49) 7. Drugs (general) (large wholesale houses) (4) (5) (8) (11) (23) 8. Dry goods 9. Hardware 10. Implements (agricult.) (seasonal dating) 11. Japanese goods 12. Lard 13. Lead (white) 14. Leather (coat) (fancy gds.) (rust. collar) (3) (12) (24) (33) (28) (26) (31)

Terms of Sale—(Continued)

2% 10d. Net 60d. (Cont.)	2% 10d. 60d. Extra	2% 10d. Net 90d.	2% 10d. Net 120d.	2% 30d.	2% 30d. Net 60d.	2% 30d. Net 90d.	2% 60d. Net 90d.
14a	15	16	17	18	19	20	21
15. Machine Tools 16. Meats (smoked) (cured) 17. Office Appliances (12) 18. Paints (mixed) (4a) (12a) 19. Shirting 20. Silk 21. Shoes (retailers) (3) (12a) (24) (33) 22. Spices (2) (4a) 23. Stationery 24. Tobacco (smoking) (twist) (plug) 25. Tubes (welded) (12a) 26. Upholstery (auto) 27. Varnishes and mixed paints (4a) 28. White goods (15) 29. Wire goods	1. Blankets (retail) 2. Hosiery (heavy woolen) (3) (12) (13) (16) (33) (43) 3. Merchandise (general) (used extensively) 4. Nightwear (general) (13) (24) 5. Shirts (work) (3) (11) 6. Suspenders (jobbers) 7. Underwear (cloth) (wholesale and retail) (4a) (5) (6) (16) (18) (48) (51) 8. White goods (14a)	1. Coffee (green) (2) (14) (13) 2. Hosiery (3) (12) (13) (15) (16) (33) (43) 3. Silk (thrown) (44) (45) 4. Underwear (general) (4a) (5) (6) (15) (18) (48) (51)	1. Tea (retail) (35)	1. Lumber (3) (11) (20) 2. Paper (wrapping) (wholesale) (12a) (26) 3. Skirts (women's) (24) (51) 4. Underwear (light weight) (wholesale) (4a) (5) (6) (15) (16) (48) (51)	1. Bedding and pillow material 2. Furniture (general) (less than carload lots) (40) 3. Harness Leather 4. Upholstered Furniture (most cases) (40)	1. Lumber (wholesale) (3) (11) (18) (20)	1. Leather (shoe soles) (12) (14) (24) (28) (31) (33)

Terms of Sale—(Continued)

2% 60d. Net 120d.	2% 10th proximo	3% 10d.	3% 10d. Net 60d.	3% 30d.	3% 30d. Net 60d.	4% 10d.	4% 10d. Net 60d.
22	23	24	25	26	27	28	29
1. Clothing material (men's)	1. Builders' supplies 2. Chemicals and drugs (main business done on cash basis) (4) (5) (8) (11) (14)	1. Cement 2. Envelopes (wholesale) 3. Leather (coat) (fancy goods) (russet collar) (12) (14) (28) (31) (33) (26) (3) 4. Nightwear (13) (15) 5. Shoes (retail) (3) (12a) (14a) (33) 6. Skirts (women's) (18) (51)	1. Gray goods (unfinished) 2. Towel material	1. Leather (shoe soles) (3) (12) (14) (24) (31) (33) (28) 2. Paper a. book b. cover c. wall d. wrapping (12a) (18)	1. Tiles (general)	1. Leather (shoe soles) (varying with locality) (3) (12) (14) (24) (31) (33) (26)	1. Carpets (made to order) (30)

Terms of Sale—(Continued)

4% 10d. 60d. Extra	4% 30d.	4% 60d.	5% 10d.	5% 10d. Net 30d.	5% 10d. Net 60-120d.	5% 10d. 60d. Extra	5% 15d.
30	31	32	33	34	35	36	37
1. Carpets (regular stock) (29)	1. Leather (upper for shoes) (3) (12) (14) (24) (28) (33) (26)	1. Clothing (men's) (49) (52) 2. Millinery (general) (38) (43) (49) (52)	1. Coats and suits (12) 2. Corsets (to moderate extent) (12) (14) (36) (49) 3. Hats (Panama) (12) 4. Hosiery (general) (retail) (3) (12) (13) (15) (16) (43) 5. Leather (uppers for shoes) (3) (12) (14) (24) (28) (31) (26) 6. Shoes (all styles) (Dept. stores) (3) (12a) (14a) (24)	1. Bearings 2. Tire rims (sold by jobbers) (42)	1. Tea (retail) (17)	1. Corsets (retail) (12) (14) (33) (49) 2. Neckwear	1. Tiles (hollow building)

Terms of Sale—(Continued)

5% 30d.	5% 60d.	5% 30d. Net 60d.	5% e. o. m. (end of mo.)	5% 10th proximo	6% 10d.	6% 10d. Net 30d.	6% 10d. Net 60d.	6% 30d.
38	39	40	41	42	43	44	45	46
1. Collars (men) (43) 2. Gloves (general) (46) (49) (43) 3. Harvesting machines (seasonal variation) (39) 4. Hay cutter (seasonal variations) (39) 5. Millinery (general) (32) (43) (49) (52) 6. Seeding machines 7. Wagons (39)	1. Harvesting machines (38) 2. Hay cutters (38) 3. Trousers (men's) (46) (49) 4. Wagons (38)	1. Furniture (carload lots) (19)	1. Brick (common) (varies as low as 2% depending on locality) etc. (3) (11)	1. Tire rims (34) 2. Tires (rubber) (used extensively when discount is given)	1. Clothing (men's) (32) (43) (49) (51) 2. Collars (men's) (38) 3. Gloves (general) (38) (39) 4. Hosiery (general) (3) (12) (13) (15) (16) (33) 5. Millinery and braid (32) (38) (49) (53)	1. Spun silk (16) (45)	1. Decorations (interior) 2. Silk (broad) (16) (45) (ribbon) 3. Upholstery 4. Velveteens, etc.	1. Gloves (38) (43) (49) 2. Hats (men's) (49) 3. Trousers (39) (49)

Terms of Sale—(Continued)

6% 10d. to 30d Net 4 mo.	7% 10d. 60d. Extra	7% 10d.	7% 10d. Net 4 mo.	8% 10d.	8% 60d.	9% 10d.	10% 10d.	10% 10d. 30d. Net
47	48	49	50	51	52	53	54	55
1. Watches (trademarked)	1. Fabrics (worsted) 2. Laces (51) 3. Underwear (cotton—women's) (4a) (5) (6) (15) (16) (18) (51)	1. Clothing (men's) (32) (51) (53) (43) 2. Corsets (retail) (12) (14) (33) (36) 3. Furs (best grade) (11) 4. Gloves (general) (38) (43) (46) 5. Hats (men's) (42) 6. Millinery (general) (32) (38) (43) (53) 7. Neckwear 8. Trousers (39) (46)	1. Piece goods (55) 2. Woolens and worsteds	1. Clothing (men's) (49) (32) (43) (53) 2. Laces (48) (small industries) (domestic) 3. Skirts (varying with locality) (18) (24) 4. Underwear (muslin and cotton) (women's) (4a) (5) (6) (15) (16) (18) (48)	1. Corduroys (men's and women's) (54)	1. Clothing (men's) (32) (43) (49) (51) 2. Millinery (general) (32) (38) (43) (49)	1. Corduroys (general) (men's and women's) (52)	1. Piece goods (woolen) (50)

SECTION 34

ABBREVIATIONS OF BUSINESS TERMS

The use of abbreviations in commercial transactions, although not recommended, is nevertheless customary and will continue, in all probability, for some time.

In preparing the following tabulation the most authoritative sources were consulted with a view to including only accepted abbreviations in general use. In correct usage many abbreviations are capitalized and others are not. In some instances there is no standardized form. As a rule the abbreviations in this list are presented in the form generally followed in trade.

A

A.	"Assented" (N. Y. Stock Exchange ticker), Class A
a.	Acre, are, answer
&	And
&c.	And the rest, and so on
@, a	At, to, from
A. & F.	August and February
A. & O.	April and October
a.a.r.	Against all risks
ab., abt.	About
a/c	Account current, account
acc.	Acceptance
acct., a/c.	Account
A/D	After date
A. D.	*Anno Domini* (L., in the year of our Lord)
admr.	Administrator
admrx., admx.	Administratrix
adv.	Advice
adv., advt.	Advertisement
afft.	Affidavit
a.g.b.	Any good brand
A. G. F. A.	Assistant general freight agent
agst.	Against
Agt., agt.	Agreement, agent, against
A. H.	After hatch
aj.	Adjustment
Al	First class
Am.	American
A. M., a.m.	*Ante Meridiem* (L., before noon)
amp.	Ampere
amp-hr.	Ampere-hours
amt.	Amount
Ans., ans.	Answer, answered
a/o	Account of
APD	Assessment paid (N. Y. Stock Exchange ticker)
approx.	Approximately
A/R	All risks
arr.	Arrived, arrivals
Art., art.	Article
A/S	After sight
a/s	Account sales
assigt.	Assignment
assmt.	Assessment
assn., assoc.	Association
Asst.	Assistant
A/T	American terms (grain trade)
ats.	At the suit of (law)
A. to O. C.	Attached to other correspondence
att., atty.	Attorney
av.	Average
avoir., avdp.	Avoirdupois

B

B.	Bid, bonds, buyer, class B
B/–	Bag, bale
bal.	Balance
B. B.	Branch bill, bill book
bbl.	Barrel
B/C	Bill for collection
B/D	Bill discounted, bar draft
B/d	Brought down
bd.	Bond, bound

bd. ft.	Board feet (or foot)
bdl.	Bundle
bdls.	Bundles
bds.	Boards
B/E	Bill of exchange
bet.	Between
B/F	Brought forward
bg.	Bag
bk.	Bank, book, bark
B/L, b.l.	Bill of lading
bl.	Bale, barrel
blk.	Black, bulk
B. N.	Bank note
BNK	Bank (N. Y. Stock Exchange ticker)
B. O., b.o.	Branch office, buyers' option
B/o	Brought over
bot.	Bought, bottle
B/P	Bills payable
B. P. B.	Bank post bill
Br., Brit.	British
B/R	Bills receivable
B/S	Bill of sale
B/s	Bags, bales
Bs/L	Bills of lading
B. T. U.	Board of trade unit, British thermal unit
bu.	Bushel
B. V.	Book value
bx.	Box
bxs.	Boxes

C

C.	Class C, coupon, cash, centigrade, county
c.	Carat (metric unit), *centum* (L., hundred)
c., cts.,	Cents
ca.	Centare (metric unit)
C. A.	Credit account, chartered accountant
C/A	Capital account
cap.	Capital
cart.	Cartage
cash.	Cashier
C. B.	Cash book, county bill
C. B. D.	Cash before delivery
C. C.	Country check, country clearing, cash credit
C. D., c.d.	*Cum* dividends (L., with dividends), commercial dock
C/d	Carried down
C. E.	Civil engineer
cent.	Centigrade
cent., Ct., ct.	*Centum* (L., a hundred)
cert., certif.	Certificate
cf.	Compare
C/f	Carried forward
C. & F.	Cost and freight
c.f.o.	Coast for orders
cg.	Centigram
cge. pd.	Carriage paid
C. G. S., c.g.s.	Centimeter-gram-second
CH	Custom-house; clearing house (N. Y. Stock Exchange ticker)
ch.	Chain
chem.	Chemist, chemistry
chgd.	Charged
chq.	Check
C. I. F.	Cost, insurance and freight
C. I. F. & C.	Cost, insurance, freight and commission
C. I. F. & E.	Cost, insurance, freight and exchange
C. I. F. C. & I.	Cost, insurance, freight, commission and interest
C. I. F. I. & E.	Cost, insurance, freight, interest and exchange
ck.	Cask, check
cks.	Casks, checks
C. L.	Carload
cl.	Centiliter
cld.	Cleared
clk.	Clerk
CLT	Collateral trust (N. Y. Stock Exchange ticker)
cm.	Centimeter
cm.^{2}	Square centimeters
cm.^{3}	Cubic centimeters
cml.	Commercial
CN	Consolidated or consols (N. Y. Stock Exchange ticker)
C/N	Credit note, circular note
C/O	Cash order
Co.	Company, country, county
c/o, c.o.	Carried over, care of
C. O. D.	Cash (or collect) on delivery
coll.	Collector, college, collateral
collr.	Collector
Com., com.	Commission, commissioner
Con., con.	Consolidated, consul
Cons., cons.	Constitution, consolidated
Cont., cont.	Contract, continued
contg.	Containing
contr.	Contract
Conv., conv.	Convertible
Copt., C.	Copyright
corp.	Corporation
corr., corresp.	Correspondence
C/P	Charter party

Cp., cp.	Compare
c/p	Custom of port (grain trade)
C. P. A.	Certified public accountant
C/R	Company's risk
Cr., cr.	Credit, creditor
Cr. 8vo.	Crown octavo—book size
Cor. Sec.	Corresponding secretary
Crs., crs.	Credits, creditors
C/S	Colliery screened (coal trade)
C/s, Cs, cs.	Cases
CT	Certificates (N. Y. Stock Exchange ticker)
C/T	California terms (grain trade)
C. T.	Cable transfer
c.t.	Commercial traveler
ctge.	Cartage
cts.	Cents
cu., cub.	Cubic
cu. ft.	Cubic feet
cu. in.	Cubic inches
cu. yd.	Cubic yard
cum. D., cum. div.	Cumulative dividend, with dividend
Cum. pref.	Cumulative preferred
curr.	Current—of the present month
CV	Convertible (N. Y. Stock Exchange ticker)
c.w.o.	Cash with order
cwt.	Hundredweight
Cy.	Currency (N. Y. Stock Exchange ticker)

D

d	*Denarius* (L., a penny)
D.	Deeds
D. & w.t.f., dwtf	Daily and weekly till forbidden
D/A	Deposit account, discharge afloat, deed of arrangement
d/a	Days after acceptance
D. A.	Documents against acceptance, documentary bill for acceptance
D. B., d.b.	Day book
dbk.	Drawback
D/D	Demand draft
D/d	Days after date
d/s, Dd/s	Delivered sound (grain trade)
Deb., deb.	Debenture
Dec., dec.	Decrease, December, deceased
def.	Deferred, defendant
deg., °	Degree (as, 30°—thirty degrees)
deld.	Delivered
dept., dpt.	Department
dft.	Draft, defendant
dg.	Decigram
diam.	Diameter
dict.	Dictionary
diff.	Difference
dim.	Diminutive
dis., disct.	Discount
dist.	District, discount
div.	Dividend
dk.	Dock, deck
dkg.	Decagram
dkl.	Decaliter
dkm.	Decameter
dkm.^{2}	Square decameter
dks.	Decastere
dl.	Deciliter
D. L. O.	Dead letter office
dm.	Decimeter
dm.^{2}	Square decimeter
dm.^{3}	Cubic decimeter
D. M. J. S.	December—March—June—September
D/N	Debit note
D/O, D. O.	Delivery order
Do., do.	Ditto—the same
doc.	Document
dol.	Dollar
dols.	Dollars
doz.	Dozen, dozens
D. P., D/P	Document against payment
D. R., d. r.	Deposit receipt (banking)
Dr., dr.	Debit, debtor, doctor, drachma, dram
dr. ap., ℥	Dram, apothecaries'
dr. av.	Dram, avoirdupois
Drs., drs.	Debtors
D/S, d/s, d.s.	Days after sight
ds.	Decistere
D/W	Dock warrant
d.w.	Dead weight
dwt.	Pennyweight (24 grains)
D/y	Delivery
dy.	Penny (as 10 dy. nails)

E

E.	East, eastern
ea.	Each
E. D.	Ex dividend
Ed., ed.	Editor, edition
Eds., eds.	Editors
E. E.	Errors excepted
E. & O. E	Errors and omissions excepted

e.g.	*Exempli gratia* (L., for example)
E/I	Endorsement irregular
Enc., encl.	Enclosure, enclosed
end.	Endorsed
Eng.	English
entd.	Entered
e.o.m.	End of the month
e.r.	En route (on the way)
est.	Estate, estimated, established
estab.	Established
et. al.	And others, and elsewhere
etc.	*Et cetera* (L., and so on, and so forth)
et. seq.	*Et sequentia* (L., and the following, and what follows)
Ex., ex.	Example, exchange
Ex	Without (as, ex-coupon)
ex cp.	Ex-coupon
ex D., ex div.	Ex-dividend
exd.	Examined
ex int.	Ex interest
exch.	Exchange
exct., exec., exor., extr.	Executor
execx., extrx.	Executrix
exp.	Expense, express, export
ex-rights	Not including rights
ex-ships	Delivered out of ships
EXT	Extended, extension (N. Y. Stock Exchange ticker)

F

F	Franc, Fahrenheit, French
f.a.a.	Free of all average (marine insurance)
F. & A.	February and August
f.a.q.	Fair average quality
f.a.q.s.	Fair average quality of season
f.a.s.	Free along ship, free alongside
fath.	Fathom
fcp.	Foolscrap
f.c.s. or f.c. & s.	Free of capture and seizure
F/d	Free docks
FD	Funding (bonds) (N. Y. Stock Exchange ticker)
Fed. Res. Bd.	Federal Reserve Board
Fed. Res. Bk.	Federal Reserve Bank
ff.	Following
f.f.a.	Free from alongside, free foreign agency
f.g.a.	Foreign general average, free of general average
f.g.f.	Fully good, fair
F. H., f.h.	Fore hatch
f.i.b.	Free into bunker (coal trade)
fig.	Figure
fir.	Firkin
f.i.t.	Free of income tax, free in truck
Fl., fl.	Florin
fl. dr.	Fluid dram
fl. oz.	Fluid ounce
FLT	Flat, that is, without interest (N. Y. Stock Exchange ticker)
F. M. A. N.	February—May—August —November
Fo., fo., fol.	Folio
F/o	For orders, full out terms
F. O., f.o.	Firm offer, free overside
F. O. B., f.o.b.	Free on board
f.o.c.	Free of charge
fol., foll., folg.	Following
for.	Foreign, forward
f.o.r.	Free on rails at point of dispatch
f.o.t.	Free on trucks
f.o.w.	First open water
F. P.	Fire policy
f.p.	Fully paid, foot-pound
F. P. A., f.p.a.	Free of particular average
F. Pd.	Full paid
Fr., fr.	French and franc
frs.	Francs
frt., fgt.	Freight
ft., (′)	Foot, feet (as, 1′ 4″—one foot four inches)
fthm., fth.	Fathom
ft. lb.	Foot-pounds
f'ture	Furniture
F. T. W.	Free trade wharf
f. up	Follow up
fur.	Furlong
fut.	Future
fwd.	Forward

G

G.	Gold, Guarantee
g.	Gram
G/a, g. a.	General average (marine insurance)
G. A.	General agent, general average
gal.	Gallon
gaz.	Gazette
G. B.	Great Britain
GB	Gold bonds (N. Y. Stock Exchange ticker)

g.b.o.	Goods in bad order
G. C. A.	General claim agent
g.c.m.	Greatest common measure
Gen., gen., gen'l.	General
gent.	Gentleman
gentn., gents	Gentlemen
G. F. A.	General freight agent
g. gr., gr. gro.	Great gross (144 doz.)
gi.	Gill
GM	General mortgage (N. Y. Stock Exchange ticker)
G. M. B., g.m.b.	Good merchantable brand
g.m.q.	Good merchantable quality
GNT	Grant (land) (N. Y. Stock Exchange ticker)
G. O. B., g.o.b.	Good ordinary bonds or brand
Gov.	Governor
govt.	Government
G. P. A.	General passenger agent
G. P. O.	General post office
Gr., gr.	Gross, grain
gr. wt.	Gross weight
gs.	Guineas
G. T. C.	Good till canceled
GTD	Guaranteed (N. Y. Stock Exchange ticker)
G. T. M.	Good this month
G. T. W.	Good this week: becomes void on Saturday
guar.	Guaranteed

H

ha.	Hectare
hab. corp.	*Habeas corpus*, (L., produce the body)
h.e.	*Hoc est* (L., that is); *hic est* (L., this is)
hf.	Half
hf. bd.	Half-bound
H. F. M.	Hold for money
hg.	Hectogram
hhd.	Hogshead
hl.	Hectoliter
hm.	Hectometer
$hm.^2$	Square hectometer
$hm.^3$	Cubic hectometer
H. O.	Head office
H. P., h.p.	Horse-power
H. P. N., h.p.n.	Horse-power nominal
hr.	Hour
ht.	Height
hund.	Hundred

I

I. B.	Invoice book
ib., ibid.	*Ibidem* (L., in the same place)
I. B. I.	Invoice book inwards
I. B. O.	Invoice book outwards
I. C. C.	Interstate commerce commission
Id., id.	*Idem* (L., the same)
i.e.	*Id est* (L., that is)
I. H. P.	Indicated horse-power
IMP	Improvement (N. Y. Stock Exchange ticker)
in., ″	Inch, inches (as 3″ x 2″)
inc., incorp.	Incorporated
in. ex.	*In extenso* (L., at length)
inf.	*Infra* (L., below)
ins.	Insurance, inspector
inst.	Instant (the present month)
instn.	Institution
int.	Interest, interior, internal, international
inv.	Invoice
I. O., i.o.	Inspecting order
I. O. U.	I owe you
I. P.	Improvement purchase
i.p.	Instalment paid (said of stocks)
irreg.	Irregular
I. S. C.	Interstate commerce
Ital., ital.	Italics

J

J/A	Joint account
J. A. J. O.	January—April—July—October
J. & D.	June and December
J. & J.	January and July
J. B.	Joint bonds
JJ.	Justices
jour.	Journal
Jun., jun., Jr, jr.	Junior

K

K. D., k.d.	Knocked down
kg.	Kilogram, keg
kilo, kilog.	Kilogram
kl.	Kiloliter
km.	Kilometer
km^2	Square kilometer
$km.^3$	Cubic kilometer
kv., a.	Kilovolt—ampere
kw., K.W., KW	Kilowatt
kw. hr.	Kilowatt-hour

L

L	Angle
L.	Latin
l.	Liter
£	Pound sterling
£E	Pound Egyptian
£T	Pound Turkish
L/A	Letter of authority
lat.	Latitude
lb.	Pound (in weight)
lb. ap.	Pound (apothecaries)
lb. av.	Pound (avoirdupois)
lb. t.	Pound troy
L. C.	London check
L/C	Letter of credit
L. C. L.	Less than carload lots
L. D.	London docks
Ld. Gt.	Land grant
led.	Ledger
l.f.	Ledger folio
l.h.	Left hand
li.	Link
L. I. P.	Life insurance policy
liq.	Liquid
LL	Leased line (N. Y. Stock Exchange ticker)
L. M. S. C.	Let me see correspondence
loco.	On the spot
long.	Longitude
L/P	Life policy
L.S., l.s.	*Locus sigilli* (L., place of seal)
£ s. d.	Pounds, shillings, pence (£3 4s. 1d., or £3-4-1)
Ltd., ltd.	Limited
l.t.	Long ton
v.	Livres, leave

M

M	*Mille* (L., a thousand)
m.	Meter
$m.^2$	Square meter
$m.^3$	Cubic meter
mach.	Machinery
mag.	Magazine
man.	Manual
M. & N.	May and November
M. & S.	March and September
manuf.	Manufactory
mar.	Maritime
max.	Maximum
M/C	Marginal credit, metalling clause
M. D.	Memorandum of deposit
M/d, m.d.	Months' date (i.e., months after date)
Mdme., Mme.	Madame
mdse.	Merchandise
mem., memo.	Memorandum
Messrs.	*Messieurs* (F., Gentlemen, Sirs)
Mex.	Mexico, Mexican
mfd.	Manufactured
mfg.	Manufacturing
mfrs.	Manufacturers
mfs.	Manufactures
mg.	Milligram
mgr.	Manager
M. H.	Main hatch
mi.	Mile, mill
$mi.^2$	Square mile
min.	Minimum, minutes, mining
min., M.	Minim
mm.	Millimeter
$mm.^2$	Square millimeter
$mm.^3$	Cubic millimeter
M. I. P.	Marine insurance policy
misc.	Miscellaneous
mix.	Mixed
ml.	Milliliter
Mlle.	Mademoiselle
M/m	Made merchantable
MM.	*Messieurs* (F., Sirs)
mm.	Millimeters
$mm.^2$	Square millimeters
$mm.^3$	Cubic millimeters
Mo., mo., mth.	Month
M. O.	Money order
M. O. D. Sales	Mail order department sales
morn.	Morning
mos.	Months, monthly
M/P	Memorandum of partnership
M/R	Mate's receipt
Mr.	Mister, Sir
Mrs.	Mistress
M. S.	Mail steamer
MS., MSS.	Manuscript, Manuscripts
M/S, m.s.	Months' sight (i.e., months after sight)
MTG	Mortgage (N. Y. Stock Exchange ticker)
μ (Greek letter *mu*)	Micron
mμ	Millimicron

N

N.	New, north
N. A.	North America
N/A	No advice, non-acceptance, new account
N/a	No account
Nat.	National
Nat. Bk.	National bank
naut.	Nautical

N. B.	*Nota bene* (L., take note—mark well) new bonds
N/C	New charter or new crop
N. & M.	November and May
N. D., n.d.	No date
n.e.–°	Polarization not exceeding degrees
nem. con.	*Nemine contradicente* (L., no one contradicting, unanimously)
N. F.	No funds, non-fundable
N. G., n.g.	Not good, no good
Ni	Nickel
n/m	No mark
N/O	No orders
No., no.	Number
nom.	Nominal
non seq.	*Non sequitur* (L., does not follow)
n.o.p.	Not otherwise provided (for)
Nos., nos.	Numbers
N. P.	Notary public
N/S	Not sufficient (funds)
N. S.	New style, new series
n.s.	Not specified
N. S. F.	Not sufficient funds
n.t.	New terms (grain trade)
N. T. O.	Not taken out
n.u.	Name unknown
N. W.	Northwest
#	Number or numbered (as #100), pound

O

o	Degree
O.	"Offered"
O. A.	Old account
o/a	On account of
O. A. T.	One at a time
O. & A.	October and April
OB	Opening of books (N. Y. Stock Exchange ticker) (Denotes that the stock will be delivered on the opening of the transfer books of the issuing company)
obdt.	Obedient
obs.	Observe, obsolete
o/c	Old charter, old crop, or overcharge
O/D	Overdraft
o/d	On demand
off.	Official
O. J. A. J.	October—January—April—July
O. K.	All correct, all right
o/o	*Per centum* (L., order of, by the hundred)
o/oo	*Per mille* (L., order of, by the thousand)
O. P., o.p.	Out of print, open policy (insurance), other people's money
opp.	Opposite
O. R.	Official receiver, owner's risk
ord.	Ordinary
orig.	Original
O. S.	Old style
o/s	Out of stock
o/t	Old term (grain trade) on track
oz.	Ounce, ounces
oz., ap., ℥	Ounce, apothecaries'
oz. av.	Ounce, avoirdupois
oz. t.	Ounce, troy

P

P. or p.	Per, page
P/A	Power of attorney, private account, purchasing agent
p.a.	*Per annum* (L., yearly)
P. a. C.	Put and call
pam., pamph.	Pamphlet
par.	Paragraph, parallel
paym't, payt, pay't.	Payment
P. & L., p. & l.	Profit and loss
P. B.	Pass book
p.c.	*Per centum* (L., by the hundred)
p/c	Prices current, petty cash
pc.	Piece, price
P. C. B.	Petty cash book
pcl.	Parcel
pcs.	Pieces
pd.	Paid
peo.	People
per. ann. or per. an.	*Per annum* (L., by the year)
per ct., per cent (%)	*Per centum* (L., by the hundred)
per. pro.	Per procuration (by agency)
pf., pfd.	Preferred
P. I.	Philippine Islands
pk.	Peck
pkg.	Package
pl.	Plural, place
plf., plff., pltff.	Plaintiff
P. M., p.m.	Postmaster, *post meridiem* (L., afternoon)
pm.	Premium

P. M. G.	Postmaster general
P/N or p.n.	Promissory note
P. O.	Postal order, post office
P. O. B.	Post office box
P. O. D.	Pay on delivery, post office department
P. O. O.	Post office order
pop.	Population
pp.	Pages
P.p.	*Per procurationem* (L., by procuration), picked ports, parcel post, partly paid
p.p.i.	Policy proof of interest (marine insurance)
PR	Preferred (N. Y. Stock Exchange ticker)
pr.	Pair, per, price
pref.	Preference or preferred
pres.	Present
Pres.	President
prin.	Principal
pro.	*Pro forma* (L., as a matter of form)
proc.	Proceedings
pro tem	*Pro tempore* (L., for the time being)
prox.	*Proximo* (L., of the next month, next)
Prs.	Printers
prs.	Pairs
P/S, P. S.	*Post scriptum*, (L., postscript), public sale
P. T., p.t.	Paying teller, post-town, private terms
Pt., pt.	Pint, part, payment; platimum (capital letter), point, port.
P. T. O., p.t.o.	Please turn over (a page or leaf)
pts.	Pints
#	Pound
pub.	Publisher, public
pub. doc.	Public document
pwt.	Pennyweight
P. X.	Please exchange

Q

Q., q.	Query or question
q.c.	Which is
qlty.	Quality
qr.	Quarter, farthing, quire
qrs.	Quarters
qt.	Quart
qts.	Quarts
quad.	Quadrant
quan.	Quantity
q.v.	*Quod vide* (L., which see)
qu., qy.	Question, query

R

R.	Rupee, registered
R/A	Refer to acceptor
R/D	Refer to drawer
rd.	Round, road, rod
R. D. C.	Running down clause (marine insurance)
re	In regard to, relating to
R. E.	Real estate
recd.	Received
recr.	Receiver
Rec. Sec.	Recording secretary
rect, rc'p't, rec't	Receipt
ref.	Reference
reg., regd.	Registered
rep., Rep.	Representative
retd.	Returned
Rev. a/c	Revenue account
R. F. D.	Rural free delivery
rm	Ream
R. O. G.	Receipt of goods (time allowed for taking discount is measured from time goods are received by purchaser)
r.o.p.	Run of paper
R/p	Return of post
R. P.	Reply paid
R. R.	Railroad
rs.	Rupees
R. S. V. P.	*Respondez s'il vous plaît* (F., reply if you please)
rt.	Right
RTS	Rights (N. Y. Stock Exchange ticker)
Ry. or Rw.	Railway

S

S	Silver
s.	Stere
$	Dollars
$g	Gold dollar
$ Mex.	Mexican dollar
s.a.	Subject to approval
S. A.	South America
S. & M.	September and March
S. A. P.	Soon as possible
s. ap., ℈	Scruple, apothecaries'
S. B.	Short bill, sales book
s.c.	Sharp (i.e., prompt) cash, small capitals
SC	Scrip (N. Y. Stock Exchange ticker)
S. C.	Safe custody
sch., schr.	Schooner
scp.	Script
S/D	Sea damaged (grain trade)

S. D. B. L.	Sight draft, bill of lading attached
S. E.	Southeast
sec.	Section, second
Sec.	Secretary
Sen., sen.	Senior, Senator
sess.	Session
SF	Sinking fund (N. Y. Stock Exchange ticker)
sgd.	Signed
sh.	Share, shilling
shipt.	Shipment
sk.	Sack
sld.	Sailed, sold
S/N., S. N.	Shipping note
S. O., s.o.	Sub-office, seller's option
Soc.	Society
S. P.	Supra protest
S. P. A.	Subject to particular average
spec.	Speculation, special, specific
spt.	Seaport
sq.	Square
sq. ch.	Square chain
sq. ft.	Square feet (or foot)
sq. in.	Square inches
sq. mi.	Square miles
sq. rd.	Square rod
sq. yd.	Square yard
Sr.	Senior, Sir
s.s., S. S.	Steamship
st., stet	*Stet* (L., let it stand)
s.t.	Short ton
STA	Stamped (N. Y. Stock Exchange ticker)
std.	Standard
ster., stg.	Sterling
stk.	Stock
str.	Steamer
Supt.	Superintendent
s.v.	Sailing vessel
S. V.	Surrender value
S. W.	Southwest
syst.	System

T

t.	Town, ton, tare, Troy
T. A.	Traffic agent
T. B., t.b.	Trial balance
T. E.	Trade expenses
tel.	Telephone
tel., teleg.	Telegram, telegraph, telegraphic
Ter.	Territory
term.	Terminal
t.f.	Till forbidden
tfr., transf.	Transfer
T. L. O.	Total loss only (marine insurance)
tn.	Ton
T. O., t.o.	Turn over
T. R.	Tons registered (shipping)
TR	Trust receipts (N. Y. Stock Exchange ticker)
Treas., treasr.	Treasurer
T. S. V. P.	*Tournez s'il vous plaît* (F., please turn over)
T. T.	Telegraphic transfer
T. T. L.	To take leave

U

U/A	Underwriting account (marine account)
ult.	*Ultimo* (L., of the last month)
UN	Unified (bonds, etc.) (N. Y. Stock Exchange ticker)
u.p.	Under proof (of spirits)
UR	Under the rule (N. Y. Stock Exchange ticker)
U. S. M.	United States mail
u.u.r.	Under usual reserves
U/w	Underwriter

V

V.	Volt
v., vs.	*Versus* (L., against)
val.	Value
var.	Various
v.d.	Various dates
ves.	Vessel
v.g.	*Verbi gratia* (L., for example)
via	By way of
vid.	*Vide* (L., see)
viz.	*Videlicet* (L., namely, to wit)
vol.	Volume
V. P. or Vice-Pres.	Vice-president
v.s.	*Volte subito* (It., turn over quickly)
v.y.	Various years

W

W.	West, western, watts
W. A.	With average
W. B., w.b.	Way bill, warehouse books, water ballast (shipping)
w.f.	Wrong font (of type)
whf.	Wharf
WI	When issued (N. Y. Stock Exchange ticker)
wk.	Week
W. O. G.	With other goods

W. P. A.	With particular average
wt.	Weight, warrant
W. W.	Warehouse warrant

X

x	By or times (as 6 x 4—six by four)
X. C., X-c., X cp.	Ex-coupon (without coupon)
X.d., X d, or X div.	Ex-dividend (without dividend)
X in. or X i	Ex-interest (without interest)
X	Ex-coupon dividend or interest (N. Y. Stock Exchange ticker)

Y

y., yr.	Year
yd.	Yard
yday.	Short for yesterday
yr.	Your, year

Z

Zn.	Zinc

INDEX

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